X-Lite *for Mac* User Guide

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This manual corresponds to X-Lite version 4.5.2.

Revision 2

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1 Introduction

X-Lite is a softphone from CounterPath that enables you to make VoIP voice and video calls, send and receive instant messages, share online status (presence) information, and exchange files. X-Lite implements SIP-based standards for phone calls, IM and presence, allowing you to work with different VoIP service providers. X-Lite also uses XMPP-based standards for IM and presence.

Standard Telephone Features

The CounterPath X-Lite *for Mac* softphone has all standard telephone features, including:

- Call display and Message Waiting Indicator (MWI).
- Speakerphone and Mute.
- Redial, Hold, Do Not Disturb.
- Call history – list of received, missed, and dialed calls.
- Auto answer.
- Five-party audio conferencing.
- Three-party video conferencing.

Enhanced Features and Functions

X-Lite also supports the following features and functions:

- Video
- IM and presence using the SIP SIMPLE protocol or the XMPP protocol.
- Contact list containing the individual user's contacts
- Automatic detection and configuration of audio and video devices.
- Acoustic echo cancellation, automatic gain control, voice activity detection.
- Support for DTMF (RFC 2833 or inband DTMF).
- Support for the following audio codecs:
  G.711aLaw, G.711uLaw, G.722, iLBC, OPUS, Speex, Wideband.
- Support for the following video codecs:
  H.263, H.263+ 1998.
- Automatic selection of the best codec based on the other party's capability, the available bandwidth, and network conditions. X-Lite switches the codec within a call in response to changing network conditions.
- Compliance to 3261 SIP standard.
- Support for these firewall traversal solutions: STUN, TURN, or ICE.

2 Installation and Setup

2.1 Getting Ready

Account Information

After choosing a VoIP service provider, you will need the following information:

- User name and domain. For example, 1331@domainA.com
- Password
- Authorization Name (if applicable)
- Firewall traversal and other network information; see “Configuring X-Lite” on page 33.

System Requirements

- Operating System: Mac OS 10.7 or 10.8. (Mac OS 10.6 is supported on a “best efforts” basis.)
- Connection: IP network connection (broadband, LAN, wireless). X-Lite requires a continual internet connection.

Multimedia Device Requirements

X-Lite requires both speakers and a microphone to make calls. Any of the following configurations are acceptable:

- External speakers and microphone
- Built-in speakers and microphone
- Dual-jack multimedia headset
- USB multimedia headset
- USB phone.

X-Lite is optimized to work with Apple iSight camera.

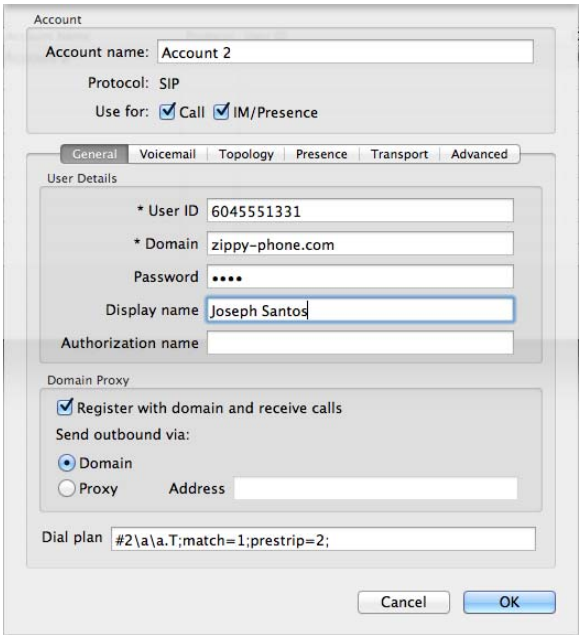
2.2 Configuring X-Lite

Setting up Accounts

After obtaining SIP account information from your VoIP service provider, you can set up X-Lite accounts.

1. From the menu bar, choose X-Lite > Preferences > Accounts. The Account list appears with one account (the Mac Address Book account) enabled; see below.
2. Click the + button and choose New SIP Account. The SIP Account window opens.
3. In the General tab, complete the User Details area with the information obtained from your VoIP service provider.
4. Complete the remaining tabs as specified by your service provider or to suit your setup. Settings that you may need to change immediately include:
   - General tab, Domain Proxy area.
   - Topology tab, if your computer is on a network and/or behind a firewall.

   For more information, see page 33.
5. Click OK; the account is enabled and registered; check the account list to make sure the account registers successfully.



Populating your Contact List

Typically, you will want to create contacts in order to easily make phone calls and send IMs.

You can:

- Add addresses to the Contact list one by one. See page 24.
- During a call that you place or receive, you can add the other party to your contact list. See “Handling an Established Call” on page 13.

For general information on contacts, see page 24.

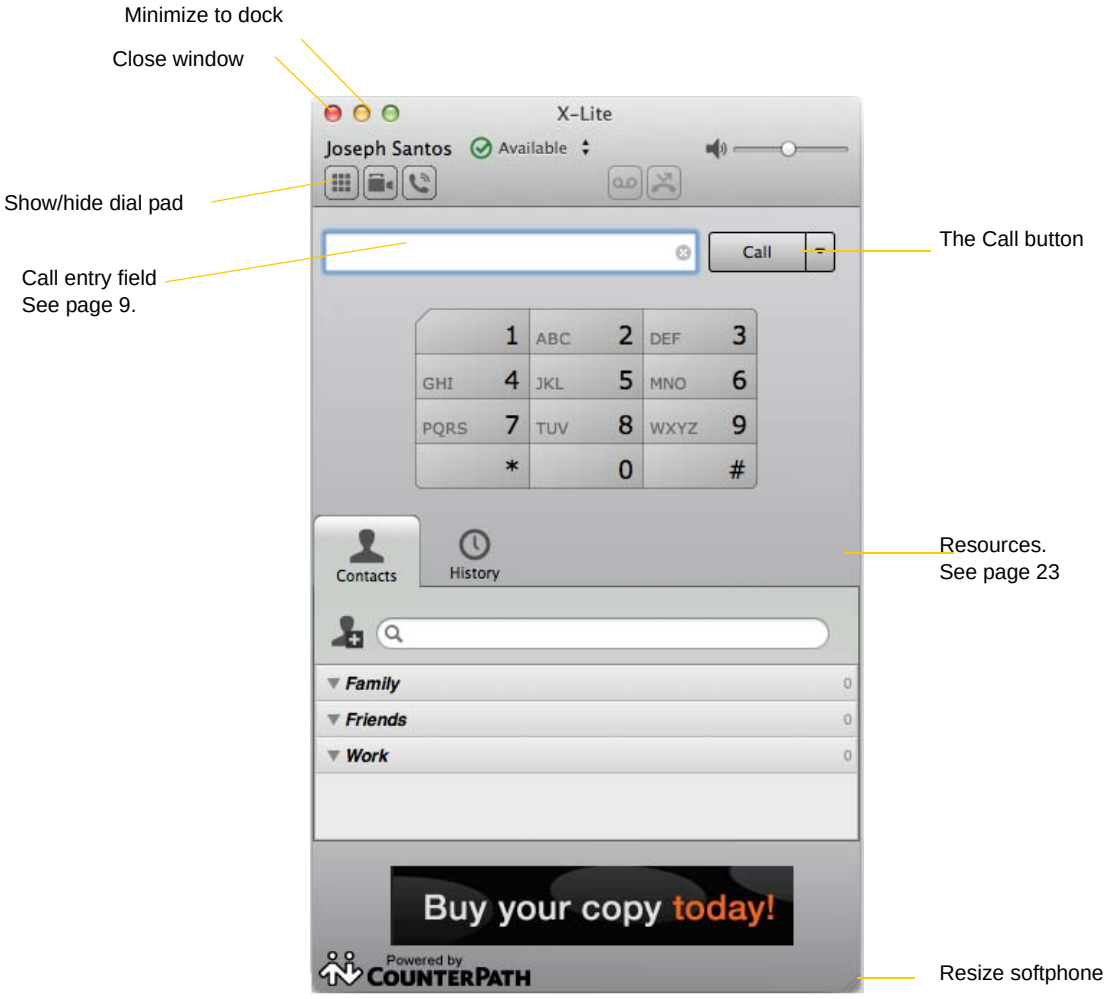
2.3 Troubleshooting

X-Lite includes tools for helping you troubleshoot problems. From the menu, choose Help > Troubleshooting.

- Audio tab: While you are on a phone call, you can test the quality of the audio. Note that to perform a valid test, you should be on an established call (not a call attempt).
- Video tab: You can verify that your camera is working.
- Devices tab: You can verify that your microphone and speakers are working and can set the volume to a comfortable level without having to actually place a phone call.

1 Making Phone Calls

1.1 The Onscreen Softphone



Compact View

To display a compact view of the softphone, hide the dialpad and hide all the resources tabs (View > Hide).

The X-Lite Menu

The menu contains the following items that are specific to X-Lite:

- X-Lite > Preferences. See page 42.
- View. Changes how X-Lite looks.
- Contacts. Lets you work with contacts.
- Actions. Lists the actions that you can perform, depending on the current “state” of X-Lite. For example, if a contact is selected, it lists all the actions that can be performed on that contact.
- Help. Provides access to various service-related features.

The X-Lite Toolbar

The toolbar has various buttons, including the message waiting indicator (MWI) and missed calls indicator. Hover over each button for a description.

Receiving an Online Status Request

When you start X-Lite, one of the first things you may see (if presence is enabled) is an Online Status Request dialog. See “Sharing Online Status” on page 28.

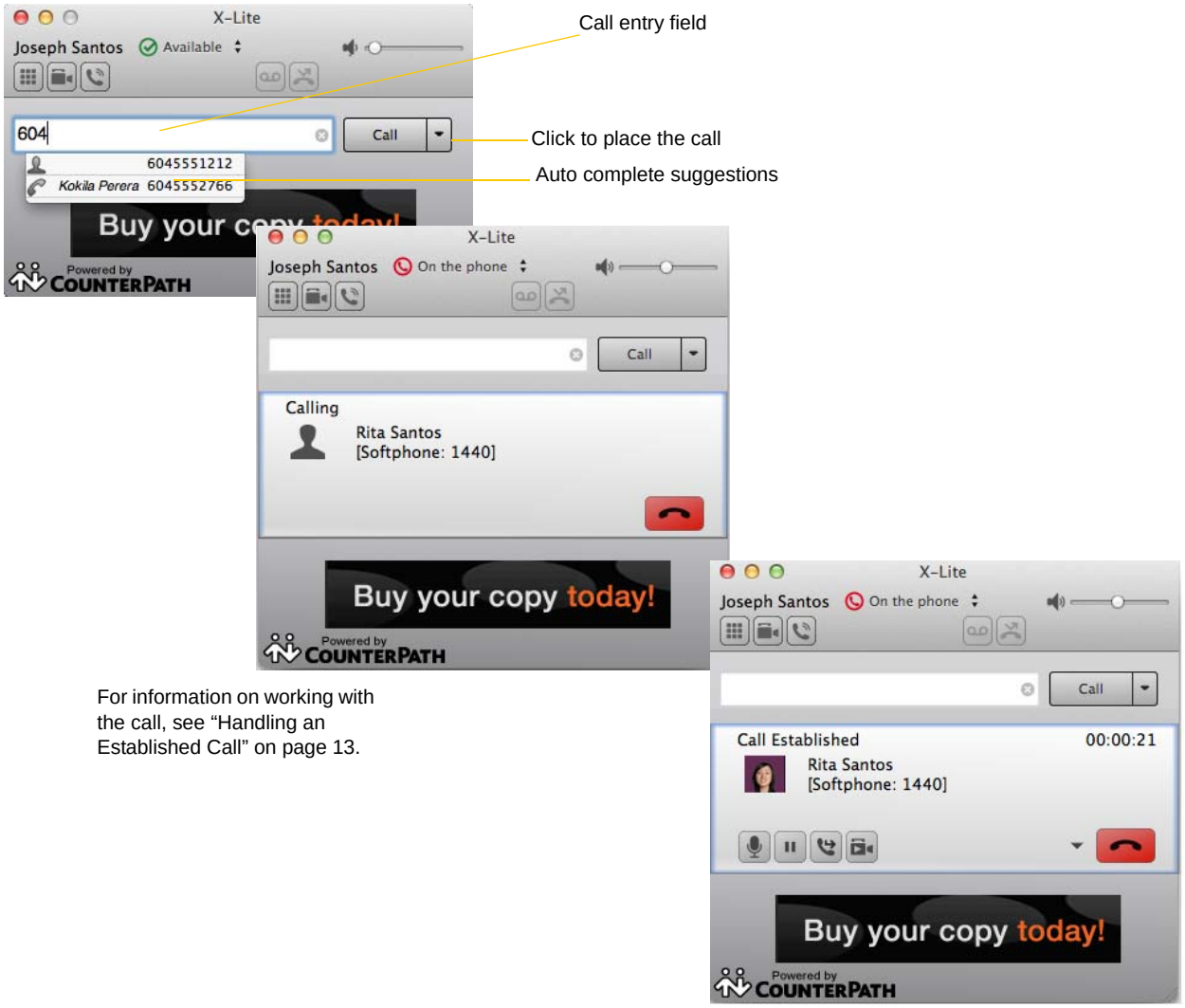
Online Status Request
Kokila Perera (6045552766) wants to communicate with you
and see your online status on account Account 2 (SIP)
Contact Details
Display as: Kokila Perera
Group: Friends
Click "Allow" to add this person to your contact list and send an online status request
Ignore
Allow

1.2 Placing a Call

Place the call as described in the table below. The outgoing call opens in its own call panel, below any other existing call panels. You will hear a ringing tone while X-Lite attempts to make a connection.

Option	From the...	Description
Keying	Dialpad or computer keyboard	1. Enter the number or address in the call entry field using the dialpad or the computer keyboard. If entering a softphone address, you can enter the entire address (6045551212@domainA.com) or just the number (6045551212). As you type, a suggestion for completing the entry may appear. Choose the suggestion or keep typing. 2. Click the Call button or press Enter.
Drag-and-drop contact or previous call	Contacts or History tab	Drag an entry from the Contacts or History tab. (If the tab contains lots of contacts, first search or filter the list.)
Control-click a contact or previous call	Contacts or History tab	Control-click an entry from the Contacts or History tab and choose Call or Video Call. (If the tab contains lots of entries, first search or filter the list.)
Single-click a contact	Contacts tab	Hover over the right side of the contact to reveal the click-to-call button. Click to place a call using the primary phone number for this contact.
Redial	Redial button	• When the call entry field is empty, click the Call button. • Or click the arrow in the call entry field and select a recent call. An audio call is placed.
Dialing	Dialpad	1. If the dialpad is not visible, click the Show/Hide dialpad button. 2. Click the numbers on the dialpad to enter the phone number. 3. Click the Call button or press Enter.
From an instant message	IM window	Click the menu at the top of the IM window and choose Call.

See the next page for an example.



For information on working with the call, see “Handling an Established Call” on page 13.

Dealing with an Auto Attendant

If you know that your call will be answered by an auto attendant and you know what menu items you will choose, you can include those menu items (DTMF) in the phone number when you dial it:

- Before the first DTMF number, include at least one capital P.
- You can include other Ps. Each P causes X-Lite to wait one second before sending the next character.
- At the end of the input, you must include a ; character.

Example: To dial a number, add a 3-second delay and then press 44, enter this in the call entry field:

```
604551212PPP44;
```

Example: To dial a number, add a 6-second delay, then press 1 then 3 then 2, each with a two second delay:

604551212PPPPPP1PP3PP2;

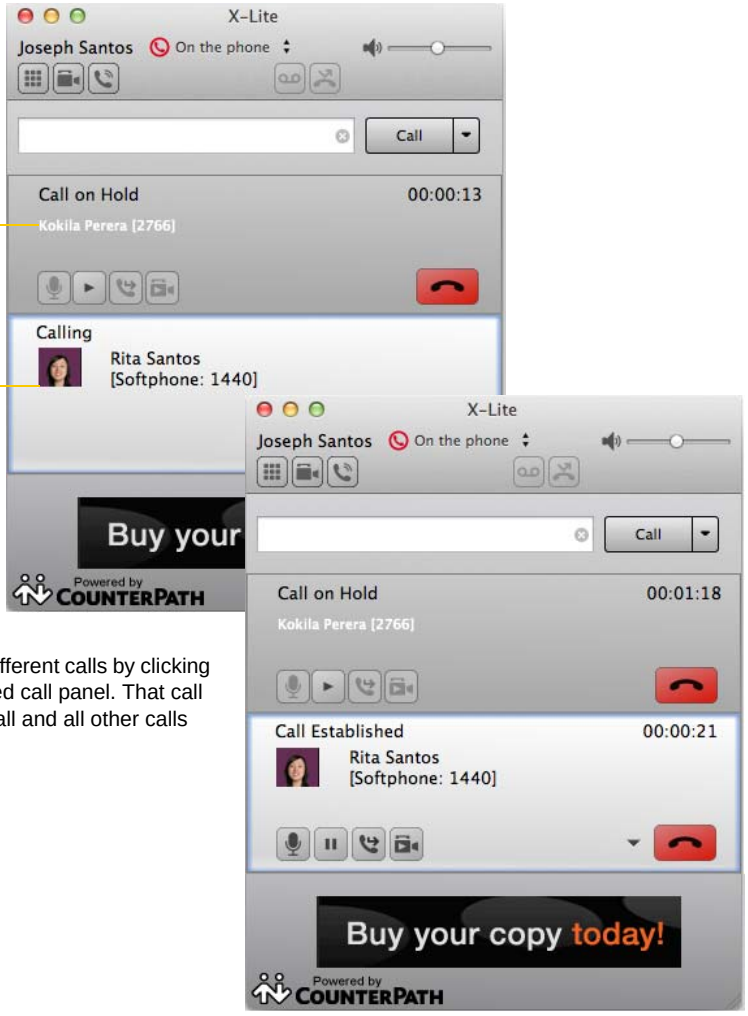
Placing another Call

You can place another call. There is no limit to the number of calls you can make, although eventually the quality of audio and video will degrade because of limitations on the computer.

Place the call in the usual way

Existing call is automatically put on hold

New outgoing call



Switch between the different calls by clicking Resume on the desired call panel. That call becomes the active call and all other calls are put on hold.

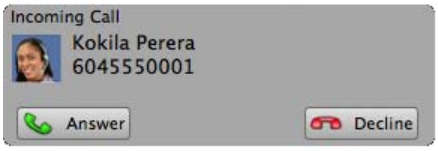
1.3 Handling Incoming Calls

X-Lite must be running to answer incoming calls. (If X-Lite is not running, incoming calls may be directed to voicemail; check with your VoIP service provider.)

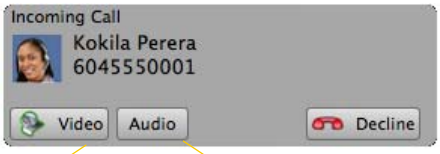
The new call appears in its own call panel. In addition, the Call Alert box appears, even if X-Lite is minimized. For information on call alerts, see page 43.

Click. If you are on another call, that first call is automatically put on hold. You are now talking to the new caller.

This is the alert for an audio-only call



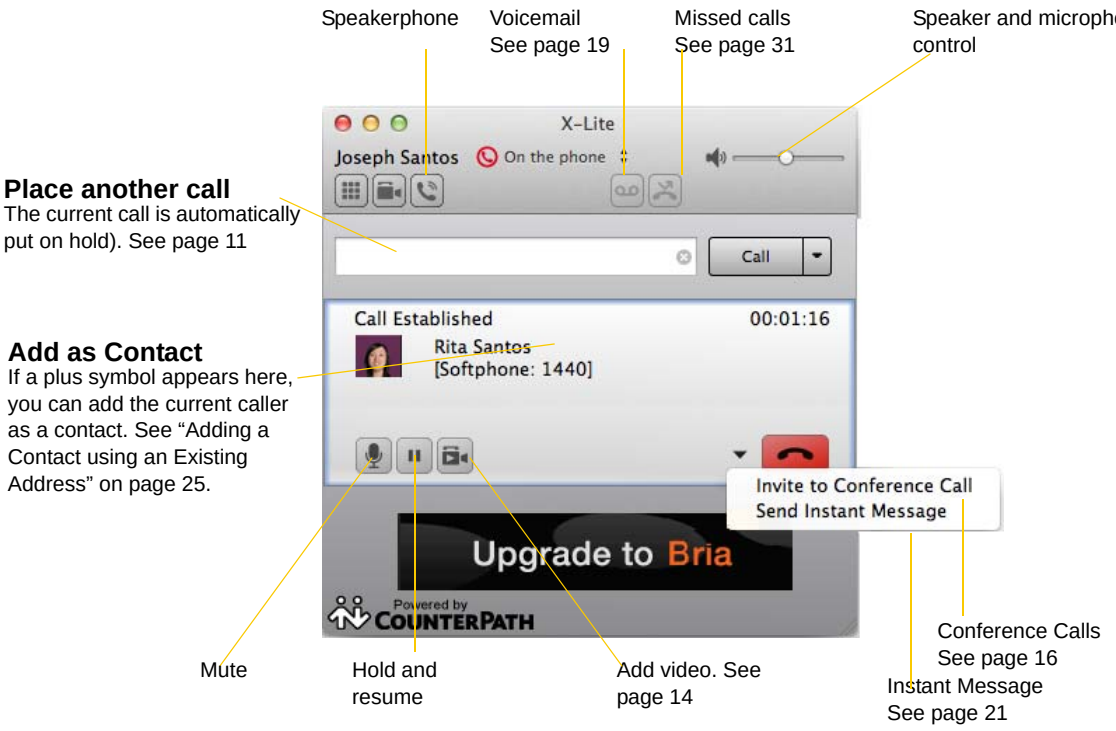
This is the alert for a video call



Click to answer a video call and start sending your video immediately

Click to answer without video; if you want (and if you have a camera), you will be able to add video later.

1.4 Handling an Established Call



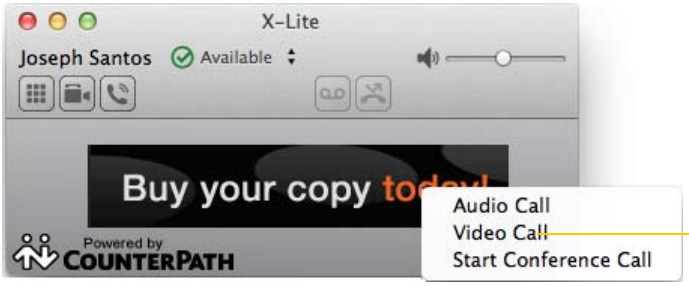
Ending a Call

Click the End call button on the Call panel (the call can be active or on hold). The call panel closes after a few seconds.

1.5 Handling Video Calls

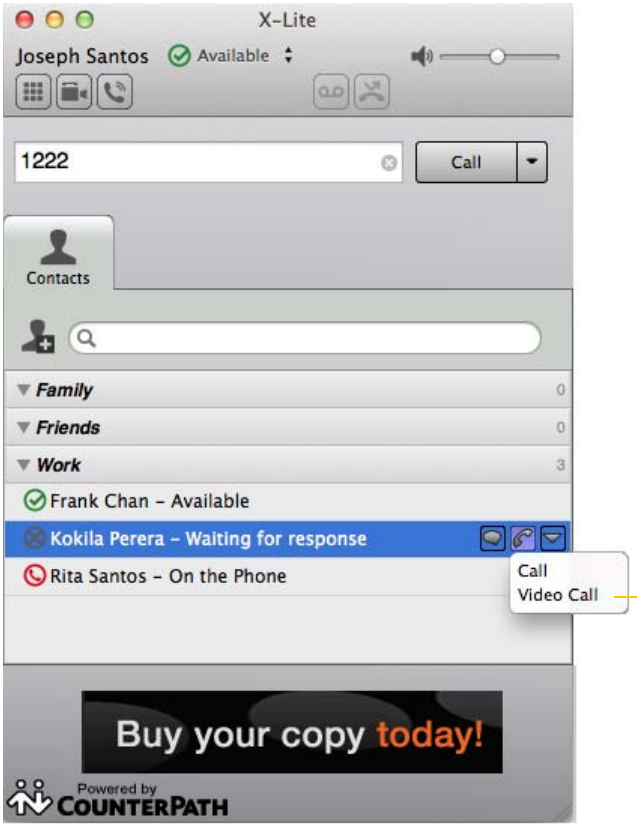
Placing a Video Call

From the Dashboard



Click the down arrow and choose Video call. If you mostly make video calls, you can Option-click this down arrow to reveal the “Set Video Call as default action” menu item.

From the Contact List or History



Click the Call icon and choose Video Call

Adding Video

If you have a camera, you can click Start Video to add video to an established call. When you add video, the other party may (or may not) start sending their video to you.

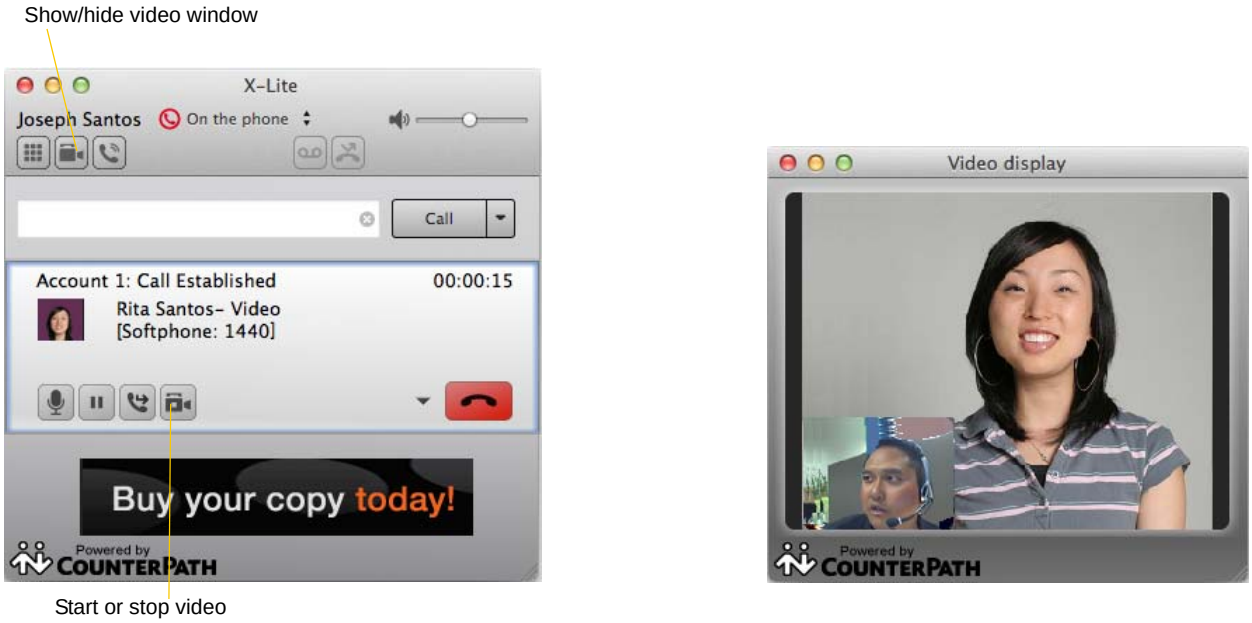
Other Party Adds Video

If the other party starts their video, your video panel automatically opens and the video is played. You can start sending your own video, if desired (and assuming you have a camera) by clicking Start Video on the call panel.

Pausing and Resuming Video

Click Stop Video on the call panel or close the video window to pause sending your video.

Click Start Video to resume sending your video; the video window will open.



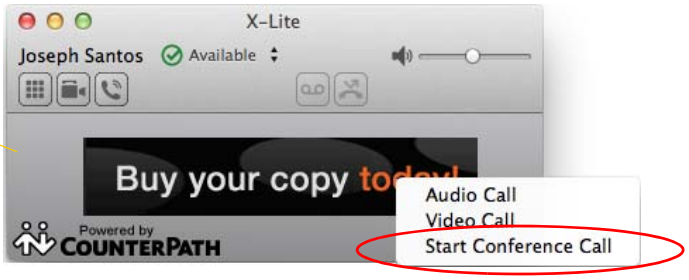
1.6 Conference Calls

Starting a Conference Call

From the Dashboard

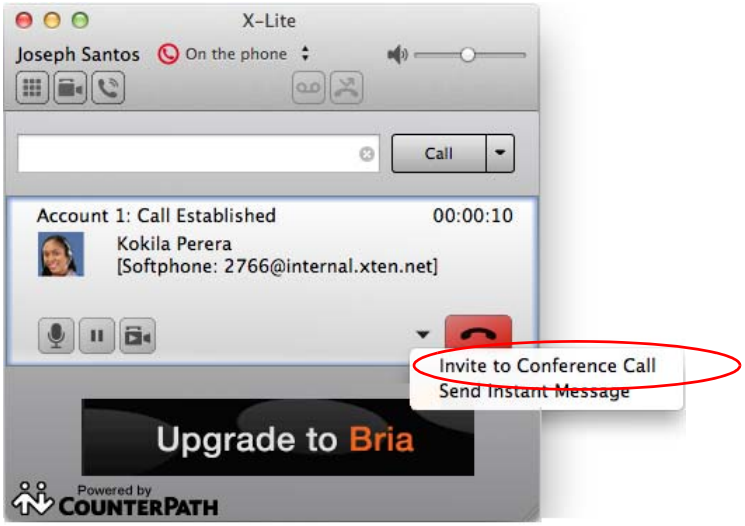
- Enter the number or address by typing
- Or drag a contact or history item
- Or select from the redial list

Then choose Start conference call

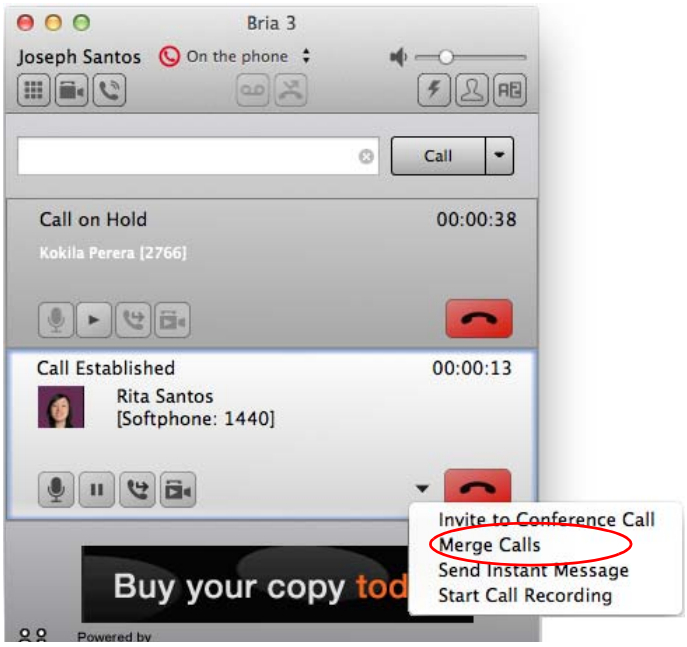


From an Existing Call

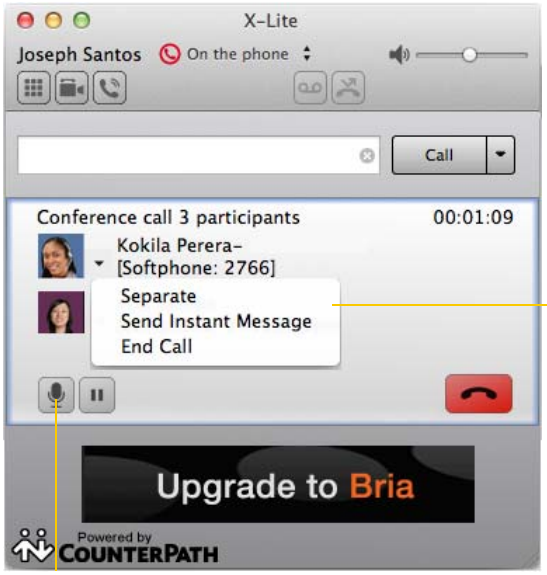
From One Established Call



From Two Established Call



Managing the Conference



Mute. When you mute during a video call, you may also want to click Stop Video to stop the video feed.

Adding another Participant

If your conference currently has only one participant, you can add the other participant in any of these ways:

- Control-click on a contact and choose Add to Conference Call.
- In the conference call panel, enter a name in the call entry field and click Add.
- Add in a separate call that is not part of the conference call: In the call panel for the individual call, click the down arrow and choose Merge Calls. This call is added to the conference call.

Send an Instant Message

Click the down arrow beside a participant name and choose Send Instant Message.

Removing a Participant

To remove one call from the conference, click the down arrow beside a participant name and choose Separate. The call becomes a separate call.

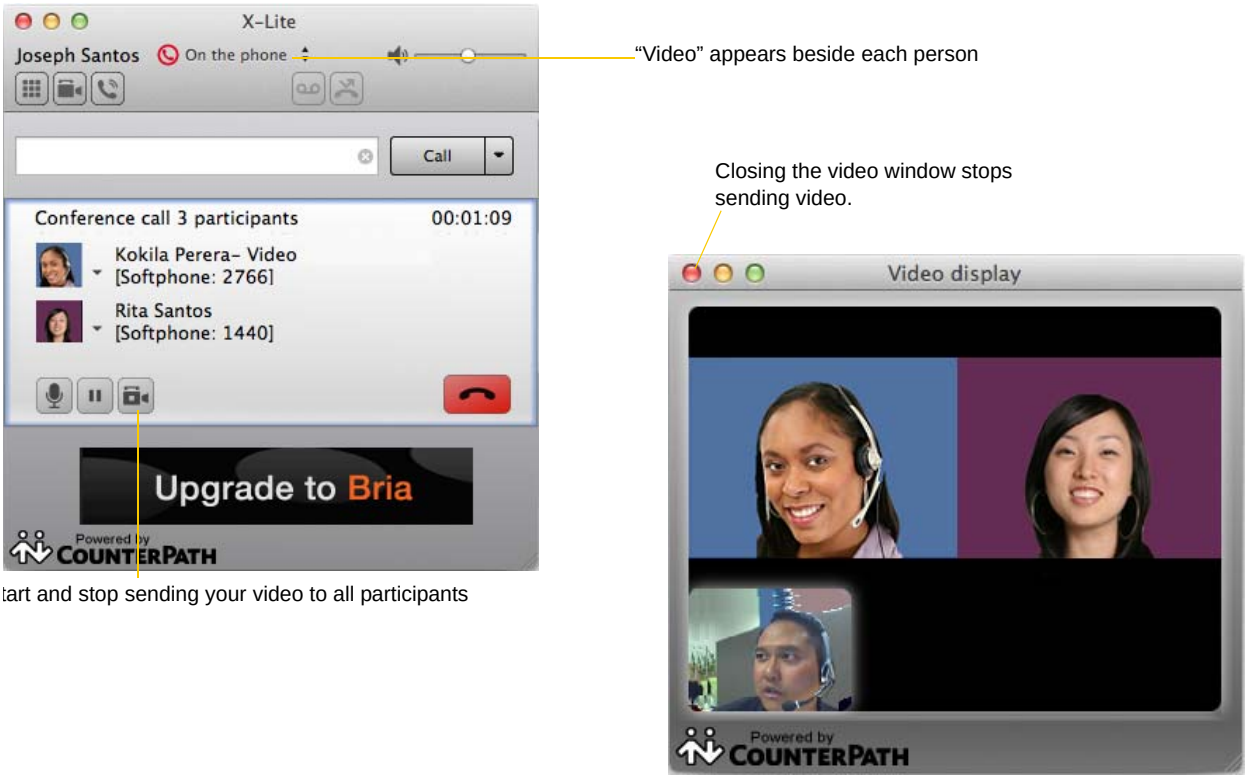
Ending the Conference

To hang up on everyone, click the End button.

Suspending the Conference

To suspend the conference, click the Hold button. All participants are put on hold.

Video Conference Calls



Starting a Conference with Video

When you start a conference from established calls, video is included if at least one of the calls already includes video. Video is sent to all the participants.

When you start a conference from scratch, video is not included. You can open your video window and choose to add video at any time. Video is sent to all the participants.

How Video Is Shared

The conference host (the person who starts the conference) serves as the host for other video. Whatever the conference host is receiving will automatically be sent to the other parties.

If the conference host pauses or stops video, other participants will no longer receive video.

1.7 Voicemail

If your service includes voicemail and you have set up voicemail options (page 35), then when you have voicemail messages, the voicemail icon appears at the top of the phone (the icon may include a number). You can click the icon to automatically connect to voicemail and listen to your messages.

2 Other X-Lite Features

2.1 Instant Messaging

Sending an IM

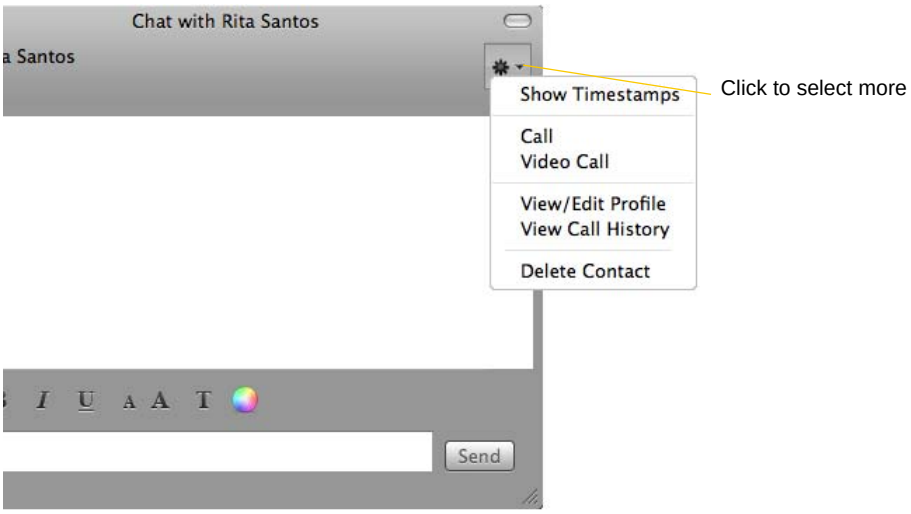
1. You can send an IM to a contact who has a softphone address.

From the Contacts tab	Control-click on the contact and choose Send IM. The contact must have a softphone address. Or click on the IM icon that appears to the right of the contact name.
An active phone call	If the person is a contact, choose Send Instant Message from the call panel menu.
An active conference call	If the participant is a contact, choose Send Instant Message from the participant menu.

2. Type the message. Include emoticons and formatting, as desired.

   To insert a return in the message, press Ctrl+Enter. (You can control the behavior of Enter and of Ctrl+Enter; see page 33.)

3. Press Enter.



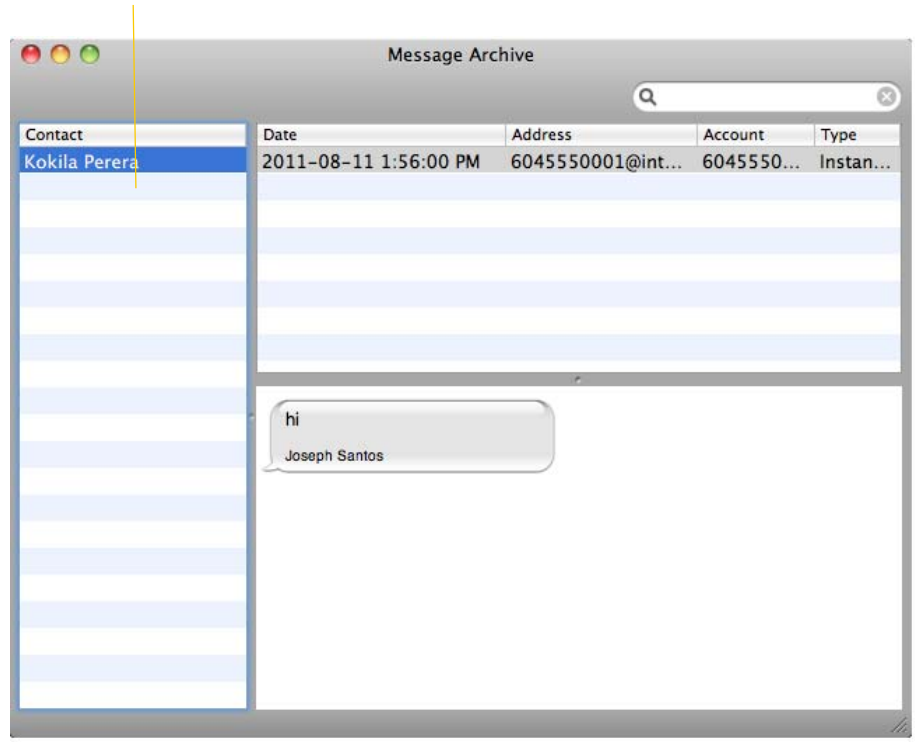
Receiving an IM

When an IM is received, either the IM window or a Call Alert pops up. (To control which window appears, from the menu choose X-Lite > Preferences > Application.)

2.2 Viewing the Message Archive

You can view your recent IM activity for any contact.

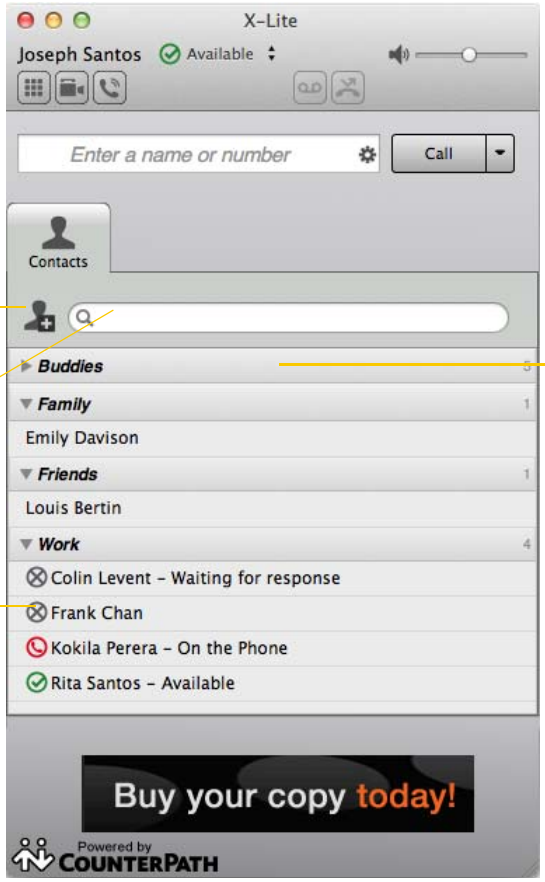
- Control-click a contact and choose View Message Archive.
- Or go to the menu bar and choose View > Message Archive.



1 The Contacts Tab

The Contacts tab displays your contacts. Each contact is shown with presence information and icons for single-click phoning and IMing.

If the Contacts tab is not showing, go to the menu bar and choose View > Show Contacts.



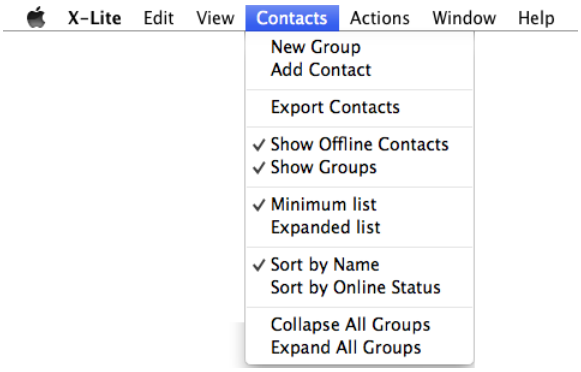
Add a Contact

Search field

Contacts are typically organized into groups. X-Lite includes built-in groups. You can add more groups, as desired.

The online status of contacts. See page 28.

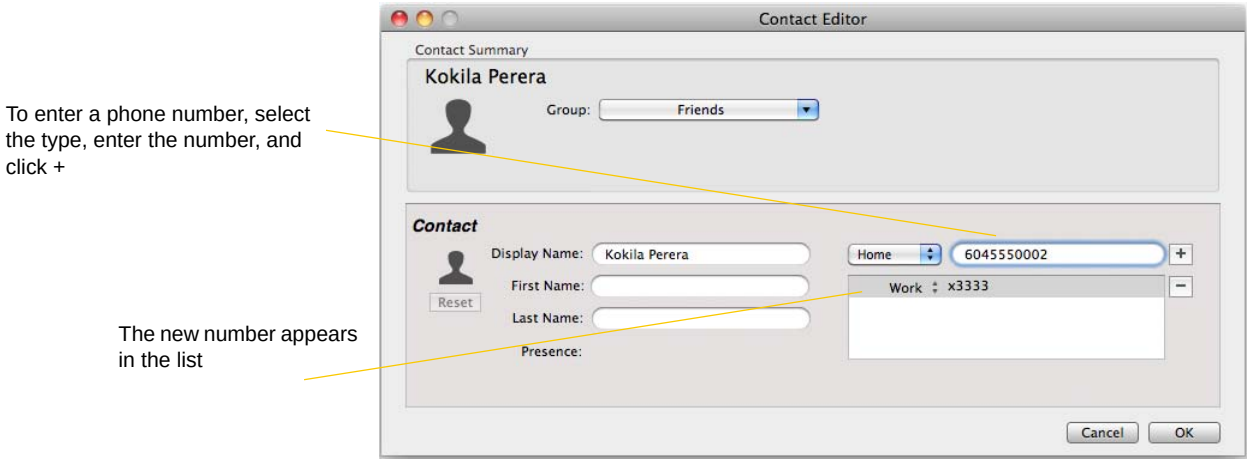
You can change the detail and layout of the contact list: from the menu bar choose Contacts and set the desired options.



1.1 Managing Contacts and Groups

Adding a Contact

Click , or control-click a group and choose Add Contact to Group. The Contact dialog appears.

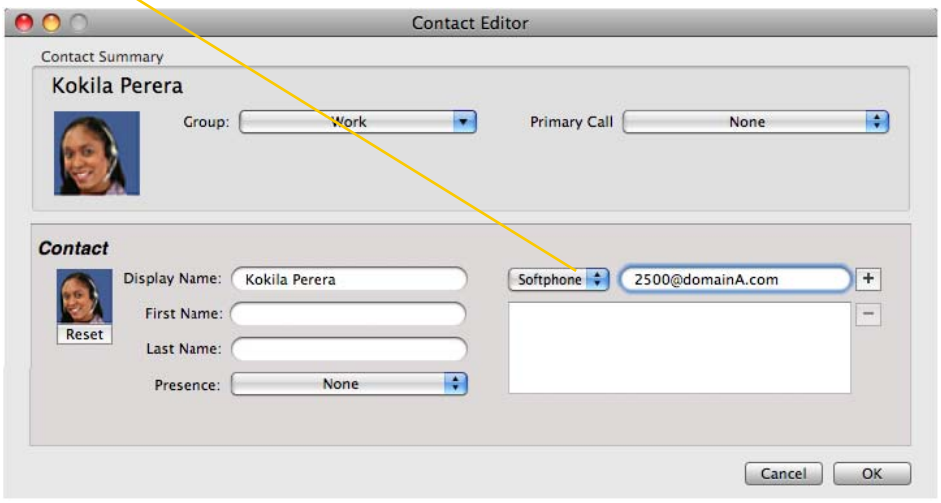


Field	Description
Contact Summary	
Group	Click to show the list of groups. Check each group this contact should belong to.
Primary Call	If the contact has more than one number, select the primary number. This number will be used with single-click calling.
Primary Presence	This field appears only the contact has more than one Softphone number. The primary presence is used as follows: • The presence icon on the contact list shows the online status for this address. • The single-click action for instant messaging uses this address. You can still send IMs to this person at their other addresses, but you must right-click and choose from the context menu.
Other Sections	
Display Name (required)	The display name for this source of information.
First Name, Last Name	Optional.
Contact Methods	Enter as many contact methods as you want. Enter a person's IM address by choosing Softphone as the type.
Presence	This field is automatically populated when you enter an address in the Softphone or Instant Message field. It indicates that you are sharing online presence information using this address. The address is also shown in the list in the Primary presence field, above.

Example

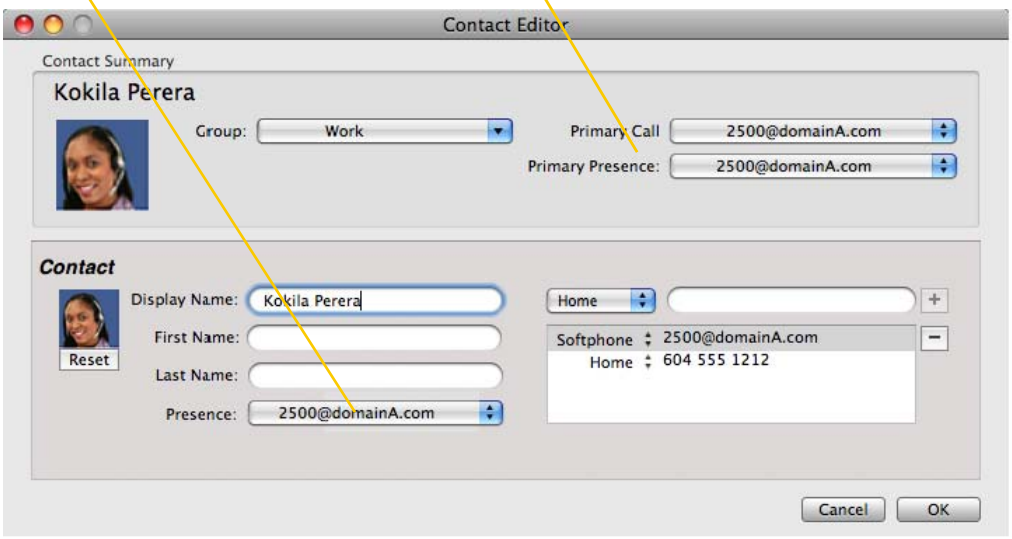
This example shows how to add a contact when your VoIP service supports online availability via your SIP account.

Enter the person's softphone number in the Softphone field



As soon as you add a Softphone entry, this field automatically appears. X-Lite will share online presence information with this person using this phone number.

In addition, these fields appear. See the table for information on these fields.



Adding a Contact using an Existing Address

You can add a contact by capturing existing information:

- If you are on a phone call with a person who is not a contact, click the Add to Contacts icon in the call panel.
- On the History tab, select an entry that is not a contact. Control-click and choose Add Contact.

The Contact Profile dialog appears. Complete the dialog as desired and press OK.

If the contact method is Softphone or Instant Message, an online status request is sent to this person. See "Sharing Online Status" on page 28.

Modifying the Contact List

Changing Contact Information

To change the information for a contact, control-click the contact and choose Edit Profile. The Contact dialog appears (see page 24).

Moving or Deleting a Contact

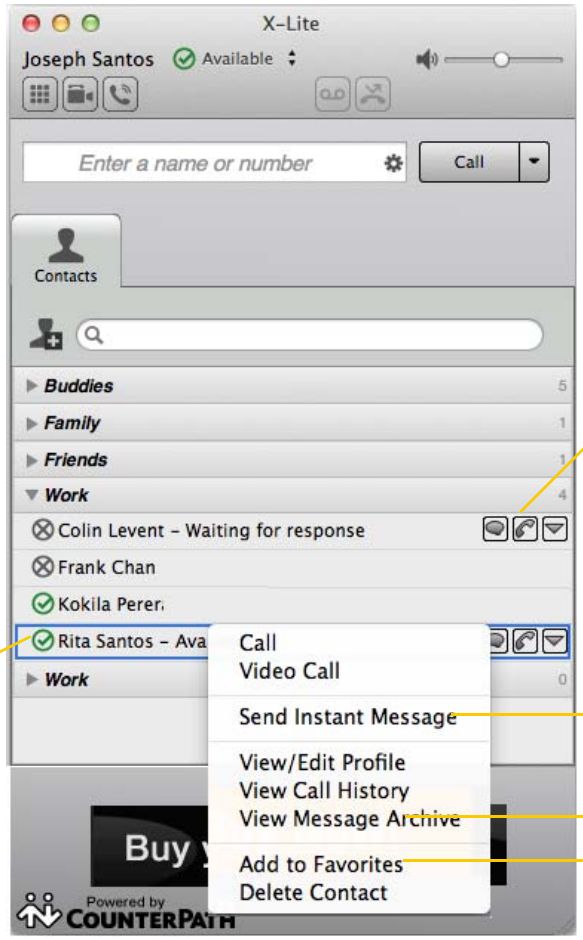
- To drag one or more contacts to a different group, select them and drag to the title bar of the new group.
- To delete one or more contacts, select them, control-click, and choose Delete or Delete Selected Items. The contacts are removed from this group. If a contact belongs to several groups, it is removed from all groups.

Adding, Deleting or Renaming Groups

Select any group, control-click, and choose the appropriate menu item.

Contacts that have no group appear under “Ungrouped Contacts.” You can delete, but not rename, this group.

1.2 Using Contacts



Hover to reveal icons. Click the phone icon to call using the primary phone number. Or click the IM icon to send an IM using the primary presence address for this contact.

You can watch the contact's online status, if the contact has a softphone address.
See page 30 for the meaning of the online status icons.
See "Sharing Online Status" on page 28 for information on obtaining online status information.

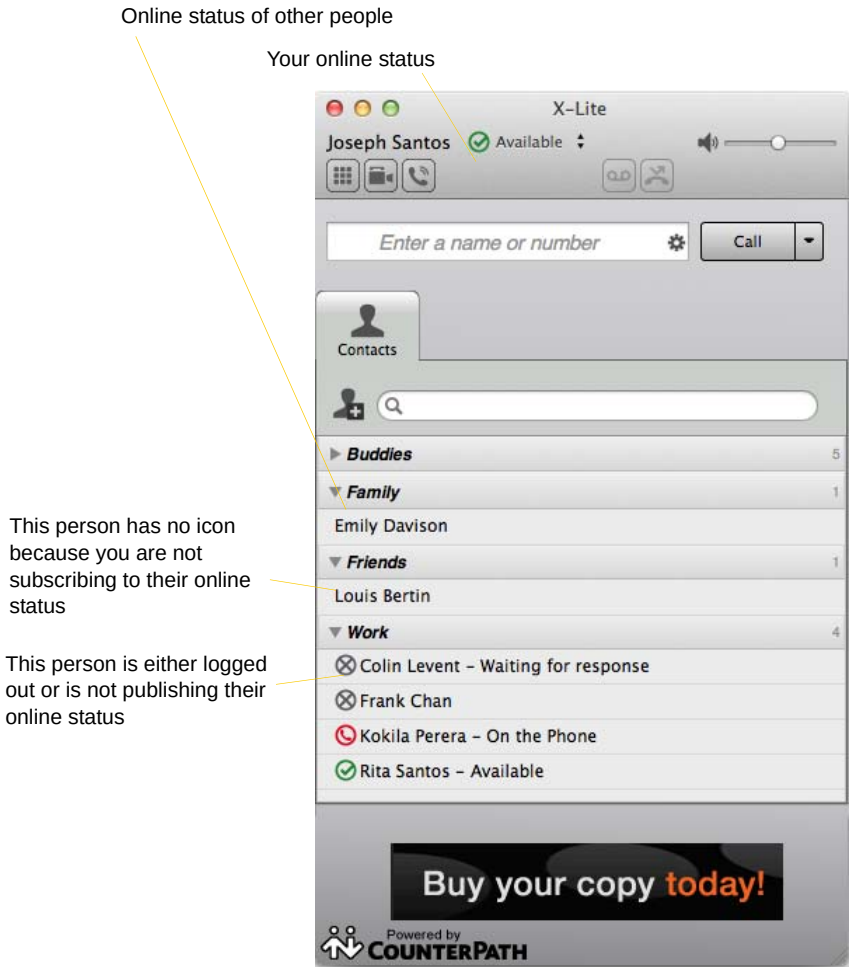
See page 21

See page 22

See page 32

1.3 Sharing Online Status

You can publish your online status to contacts who have softphone address, and you can set up X-Lite to view the online status of other contacts. Typical online statuses are available, on the phone, busy, and so on.



Sharing Online Status

Watching Others' Status

If a contact has a SIP address in the Softphone field, X-Lite will automatically obtain status information for this address.

When you choose to share presence information, X-Lite sends the contact a notification request. The request asks that you be able to see that person's status. If the person allows this request, then the icon beside their name (in your Contacts) becomes color coded to specify their status.

Allowing Other Parties to See your Status (Publishing your Status)

Continuing from above, when the other person allows the notification request, your name is added to their contact list. As soon as you are added to their list, a request is sent back to you requesting that they be able to see you. X-Lite accepts this request automatically, and the other person can now see your status.

Receiving an Online Status Request

Someone who is not one of your contacts may add you as a contact on their end, and may include your SIP address. In this case, X-Lite receives an online status request.

Online Status Request
Kokila Perera (6045552766) wants to communicate with you
and see your online status on account Account 2 (SIP)
Contact Details
Display as: Kokila Perera
Group: Friends
Click "Allow" to add this person to your contact list and send an online status request
Ignore
Allow

Setting your Online Status

Changing your Status

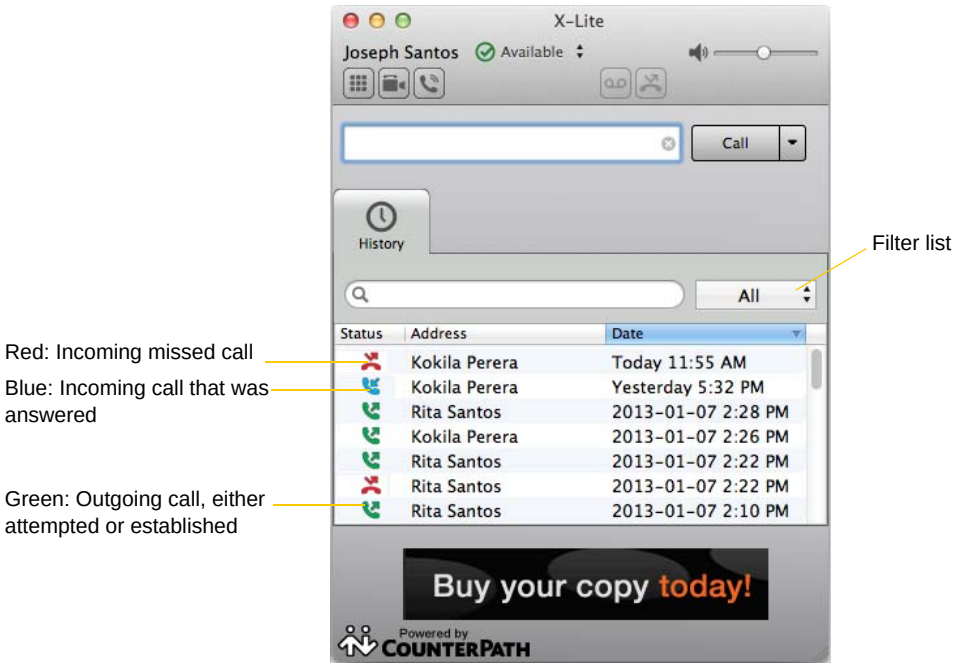
Click the down arrow beside the online status indicator on X-Lite, and select the desired value. See the table below.

Setting up Online Status Indicators

Indicator	Meaning for your Status	Meaning for Others' Status
Available	Either: • You have set your status to this value. • X-Lite has determined that you are logged on but not on the phone or idle. When you have this status, X-Lite will automatically detect when you are idle or on the phone, and change the status to match.	You can contact this person.
Busy	You have set your status to this value. X-Lite will never automatically switch you out of this status; you must switch yourself.	You can contact this person.
Away	You have set your status to this value. X-Lite will never automatically switch you out of this status; you must switch yourself.	You can contact this person.
On the phone	Either: • You have set your status to this value. In this case, X-Lite will never automatically switch you out of this status; you must switch yourself. • You started a phone call when your status was "Available". When your call finishes, your status reverts to "Available".	You can contact this person.
Not available for calls	You have set your status to this value. X-Lite will never switch you out of this status; you must switch yourself.	You cannot contact this person.
Do not disturb	You have set your status to this value. X-Lite will never switch you out of this status; you must switch yourself.	You cannot contact this person.
Idle	You have not moved or clicked the mouse or pressed a keyboard key for the Idle period. To set the Idle period see page 42. As soon as you click the mouse or keyboard, your status changes to "Available".	You can contact this person.
Offline	You have set your status to this value. The other person sees you as offline, even though you are not actually offline. The other person cannot tell the difference between this status and you really being offline.	The contact is either not logged on or does not want to share online status.
No icon	Not applicable	You are not watching the other person's online status.

2 Using Other Resources

2.1 The History Tab



From the menu bar, choose View > Show History.

Managing the List of Calls

You can control-click on an entry in a list to:

- Delete the call.
- Delete all entries in this list.
- Edit the profile if the entry is a contact.
- Add as contact. The Contact dialog appears. See “Adding a Contact using an Existing Address” on page 25.

Phoning from History

You can control-click on an entry to place a call to this person, using the contact method that was used for this call. You can:

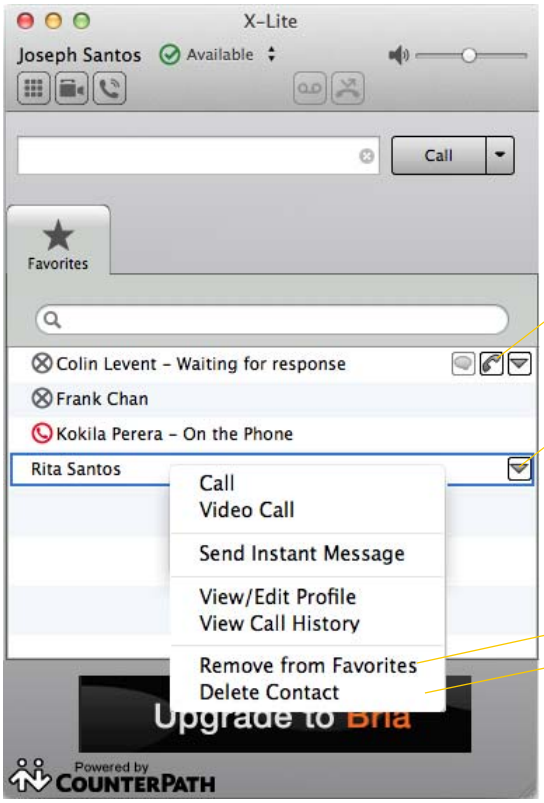
- Control-click on an entry and select Call or Video Call to place a call to this person, using the contact method that was used for this call.
- Place a call to this person and add them to a conference call that is in progress. For more information on conference calls, see page 16.

2.2 The Favorites Tab

To view the Favorites tab go to the menu bar and choose View > Show Favorites.

You can create favorites from your contact list. They will be displayed in both the contact list and in the Favorites tab.

Select the desired contacts, then control-click and choose Add to Favorites.



Quick links to IM or phone this person

Menu for other actions

You can perform nearly all the same actions on the contact in Favorites as you can in the contact list.

Removes from Favorites but does not remove from the contact list

Removes from Favorites and the contact list

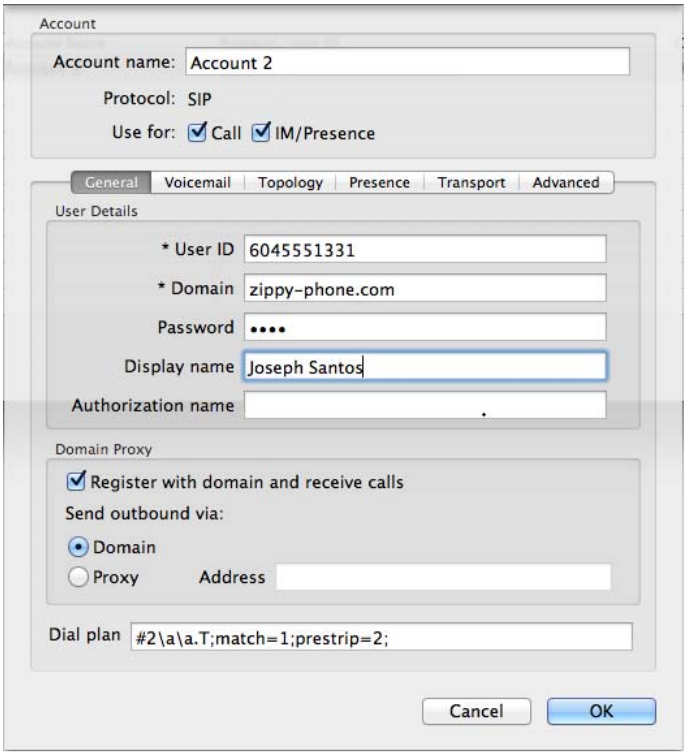
3 Configuring X-Lite

From the menu bar, choose X-Lite > Preferences. The Preferences window appears.

- When configuring X-Lite the first time, click the Accounts tab and set up the account. Then complete other tabs as desired.
- After the initial setup, display whichever tab you want.

3.1 Account

Account – General

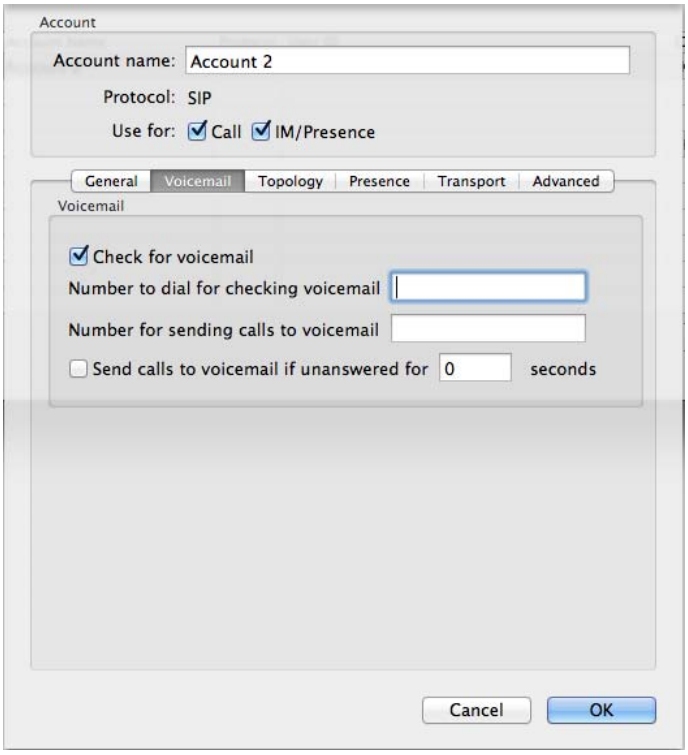


Fields with an asterisk are required

Field	Description
Account name	If desired, change the account name to something that is meaningful to you. For example, the name of the VoIP service provider.
Protocol	Read-only. Always specifies SIP.
Use for Call	If checked, this account is eligible to be used for phone calls. If unchecked, this account will never be used for placing phone calls.
Use for IM/Presence	If checked, this account is eligible to be used for IM and online status (presence). If unchecked, this account will never be used for IM and online status.
User Details	

Field	Description
User ID	Typically the account number for the softphone account. For example, 6045551212 or 2766. Provided by your VoIP service provider.
Domain	For example, domainA.com. Provided by your VoIP service provider.
Password	Provided by your VoIP service provider.
Display name	This name is displayed in the X-Lite title bar. Other people will see you as this name.
Authorization name	May not be required. If it is required, it will be provided by your VoIP service provider.
Domain Proxy	
Register with domain and receive calls	Check this box if you want to register with your VoIP service provider, so that you can receive incoming calls. Typically, this field is checked. This field must be left unchecked when, for example, your level of service does not include the ability to receive incoming calls. In that case, turning this field on may cause registration to fail (when you close the Account Properties window).
Send outbound via	Choose the setting specified by your VoIP service provider: • Domain: If your VoIP service provider requires that traffic be directed to proxies that are discovered via the domain. • Proxy Address: If your VoIP service provider has an outbound proxy address and requires that you provide the address to X-Lite. For the address enter a domain name (for example, domain.com) or an IP address (for example, 123.456.789.012). If you are using X-Lite in a test lab, it is possible that neither of these settings is suitable; see page 41 for a third way to direct traffic.
Dial Plan	Information about the syntax of the numbers used by this VoIP service provider. Provided by the service provider. The default plan is: #1\a\a.T;match=1;prestrip=2; For information on determining whether you need to modify the default dial plan, see page 52.

Account – Voicemail



These settings let you set up to interact with your VoIP service provider's voicemail service.

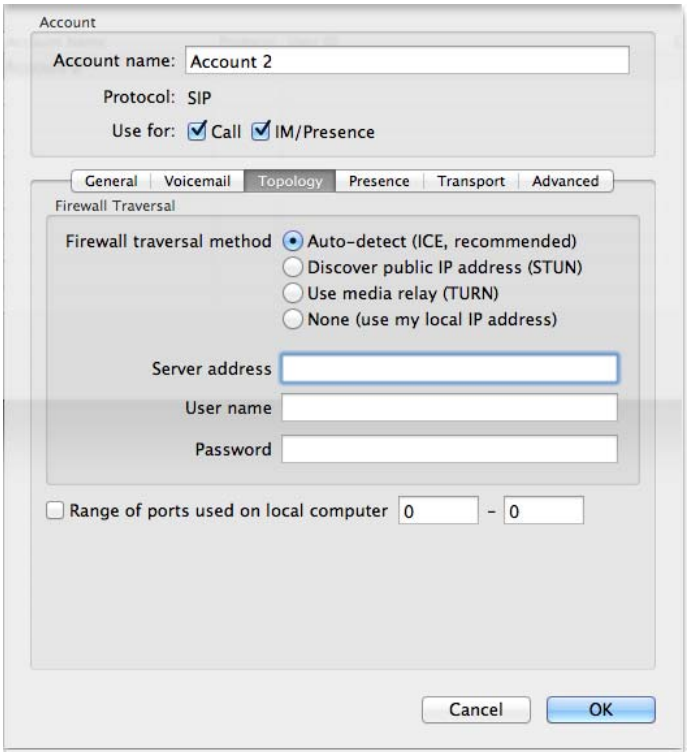
Your service provider may provide the ability to set up for voicemail outside of X-Lite, for example, by phoning a softphone address and following the voice prompts, or by accessing a website.

Check with your service provider to determine if another setup mechanism is available. If so, check what the settings are in that setup, and make sure you enter compatible information in X-Lite.

Field	Description
Check for voicemail	Set the checkbox in one of these ways: • Check the box if X-Lite must subscribe to be notified when there is a voicemail for you. In other words, to configure for "subscribe for message waiting". • Clear the checkbox if the service provider's voicemail server sends notifications without X-Lite subscribing. In other words, to configure for "implicit subscription". • Clear the checkbox if the service provider does not support voicemail. Check with your VoIP service provider for the correct configuration. Voicemail is offered by your VoIP service provider; it is not part of X-Lite. Contact your service provider for information on using voicemail.
Number to dial for checking voicemail	Optional, but complete this field only if your VoIP service includes voicemail. • Completing this field activates the voicemail icon in the tool bar. When you click this icon, X-Lite will dial this number. You will be connected to your service provider's voicemail and can listen to your messages. • If you leave this field empty, then this icon will not work; you will have to manually dial this number in order to connect to voicemail. Enter the number or SIP address provided by your VoIP service provider.

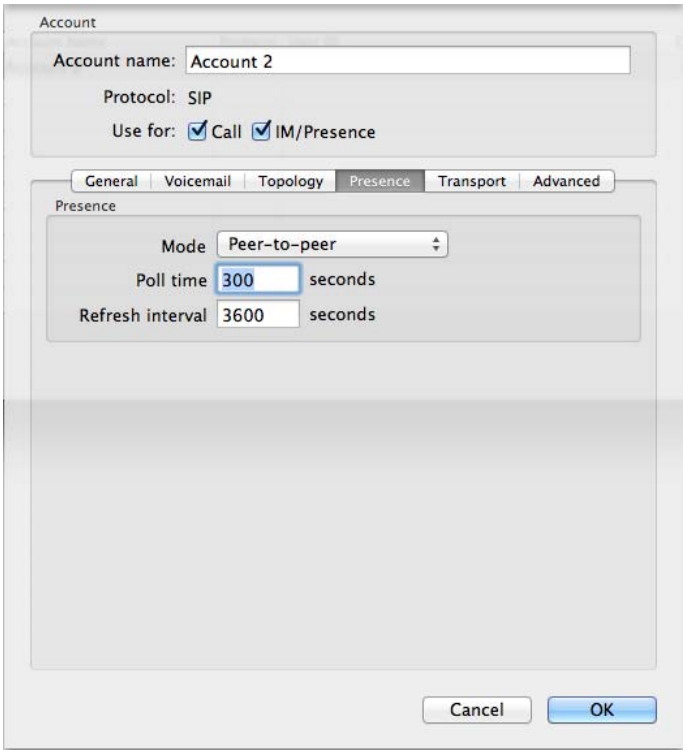
Field	Description
Number for sending calls to voicemail	Complete only if your VoIP service includes voicemail. Optional, but you must complete it if you check “Send calls to voicemail if unanswered”. This is the number that incoming calls will be forwarded to if they are unanswered after the specified interval (below). If you leave this field empty, then X-Lite will never forward calls to your service providers’ voicemail. However, most VoIP service providers have their own mechanism for sending unanswered phone calls to voicemail. So leaving this field blank does not mean that forward-to-voicemail does not work. Enter the number provided by your VoIP service provider.
Send calls to voicemail if unanswered	Complete only if your VoIP service includes voicemail. To send to voicemail after the specified number of seconds. Your service provider may also provide a similar feature that is set up outside of X-Lite. If so, make sure you do not enter competing information in X-Lite and in the service provider’s user interface. For example, if you turn off this field, make sure the same feature at your service provider is also turned off. Otherwise, all your calls will continue to be forwarded.

Account – Topology



Field	Description
Firewall traversal method	Choose the setting recommended by your VoIP service provider: • Auto detect using ICE: Automatically determine the contact address for signaling traffic. Advertise the local IP, public IP (discovered via STUN, if available) and media relay IP and use these to automatically determine the best route for media traffic during calls. • Discover public IP address: Advertise the public IP address (discovered via STUN) for the contact address for signaling traffic, and for the connection address for media traffic. • Use media relay (TURN): Advertise the public IP address (discovered via STUN) for the contact address for signaling traffic. Advertise the address of a media relay server (discovered via TURN) for the connection address for media traffic. • None: Advertise the local IP address only for both signaling and media traffic.
Server address	• Empty: Discover the address of the firewall traversal server (the STUN or TURN server), if available, using DNS SRV. • Specified: Use the firewall traversal server specified as either an IP address or a fully qualified hostname. If you use the “Auto detect using ICE” option, then you can only enter a STUN server here. Don’t enter a TURN server because when ICE is used, TURN is not supported.
Range of ports	The appropriate setting depends on your computer setup: • Checked: If your computer is behind a restrictive firewall that only allows specific port ranges to be used. Enter the range of ports to use for your SIP account. (You must also open those ports on your firewall; refer to applicable firewall documentation for information.) • Unchecked: If your computer is not behind a restrictive firewall.

Account – Presence

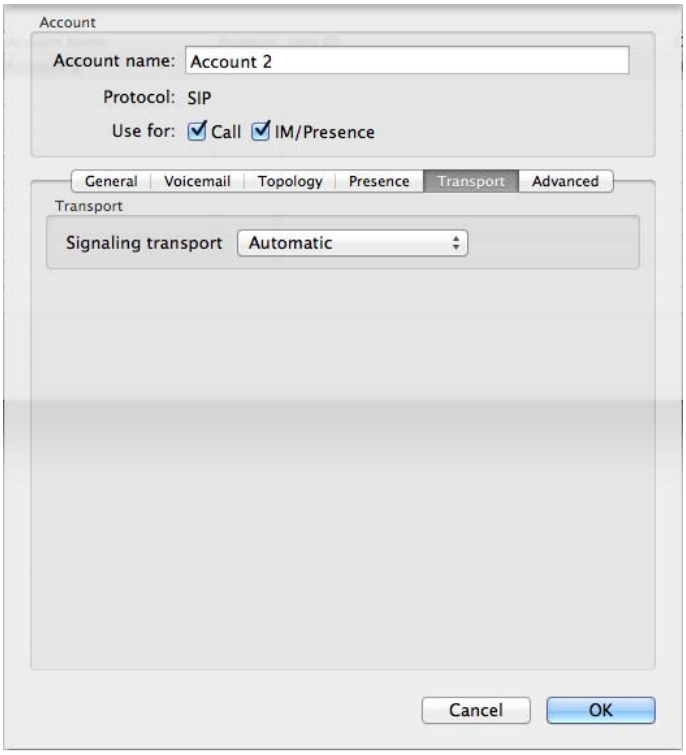


Presence allows other softphone users to see your online status, and also allows you to see the online status of others.

This tab lets you set up to share presence information with contacts.

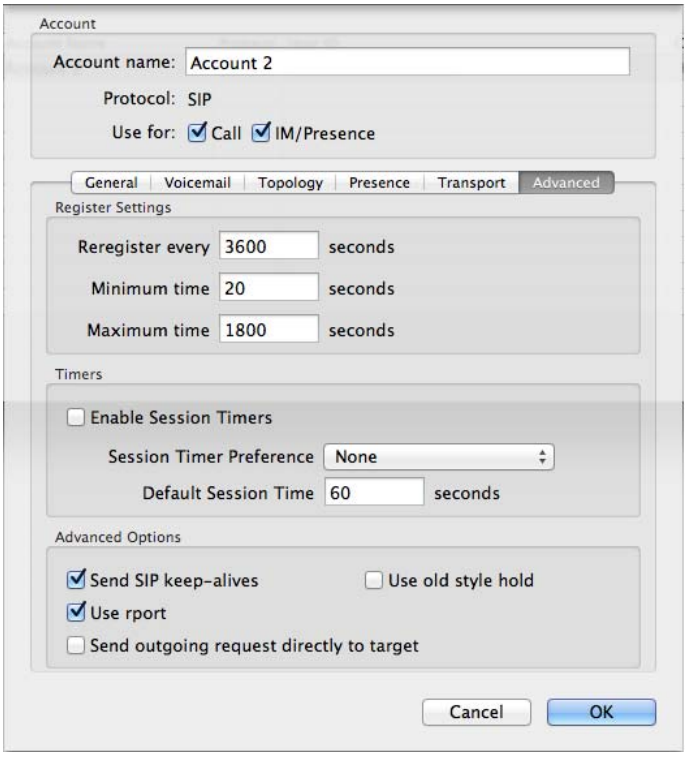
Field	Description
Mode	Choose the setting specified by your VoIP service provider: • Disabled: Presence is not supported. • Presence Agent. • Peer-to-Peer.
Poll time	Enter the value specified by your VoIP service provider.
Refresh interval	Enter the value specified by your VoIP service provider.

Account – Transport



Field	Description
Signaling Transport	Contact your VoIP service provider to identify the types of transport that are supported. Then choose a supported transport: • Automatic: X-Lite sets up the transport based on the capabilities of the network and the X-Lite computer. Choose this option if you do not care which transport is used. • TCP • UDP

Account – Advanced



Field	Description
Register Settings	
Reregister every	The time interval between X-Lite's attempts to reregister in order to refresh the account registration with the VoIP service provider for this account. A value of zero means not to reregister after the initial registration. This value is placed in the "Expires" header field of the REGISTER message.
Minimum time	If the reregistration fails, X-Lite will wait this amount of time, then attempt to reregister. If the second attempt fails, X-Lite will wait twice this time and try again, then four times this time, and so on, until reregistration succeeds.
Maximum time	This is the maximum wait time between attempts to reregister. Once this maximum is reached, X-Lite will wait this time for all subsequent attempts. For example, the min. time is 20 secs, the maximum time is 120 secs. X-Lite will attempt to reregister as follows: • Wait 20 secs. • Attempt to connect. • If fail, wait 40 secs. • Attempt to connect. • If fail, wait 80 secs. • Attempt to connect. • If fail, wait 120 secs (the maximum) • Attempt to connect. • If fail, wait 120 secs, and so on.
Timers	
Enable session timers Default session time	A session timer is a mechanism to detect whether a call session is still active from the signaling point of view. When the timer expires, a refresh is sent from one party to the other. The timer is then reset. • Turn on to enable session timer. Enter a value in Default session time. • Turn off to disable session timer; refreshes will never be sent.

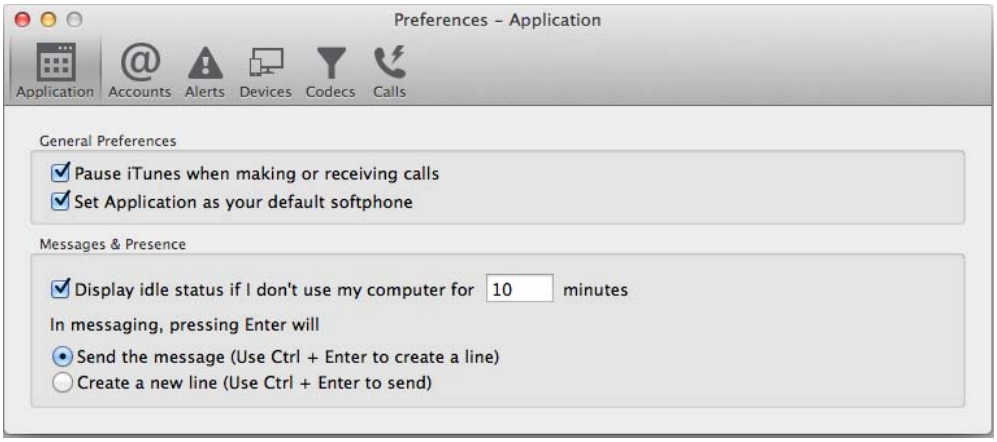
Field	Description
Session timer preference	This field specifies your preference for which party should send the refresh. The preference is not a guarantee that the refresh will be performed by the specified party. The choices are: • None: No preference. • Local refreshes: Your computer sends. • Remote refreshes: The other party sends. • UAC refreshes: The user agent client (the party that initiated establishment of the communications) sends. • UAS refreshes: The user agent server (the other party) sends.
Send SIP keep-alives	Typically on, to instruct X-Lite to send SIP keep-alive messages in order to maintain a “pinhole” through your firewall for SIP messaging.
Use rport	Typically on.
Send outgoing request directly to target	When checked, requests with a complete URI (user@ABC.com) go to ABC.com and the “Send outbound via” field on the General tab (page 33) is ignored. If you check this field, make sure you also set “Send outbound via” (on the General tab) to “Domain”. Typically off. This field is intended for test labs and may cause problems in a NAT environment.
Use old style hold	Check this box only if your VoIP service provider advises you to do so.

3.2 General Preferences

From the menu bar, choose X-Lite > Preferences. The Preferences window appears. All the tabs on this window except for “Accounts” are preferences tabs. These tabs let you control the way that you work with X-Lite.

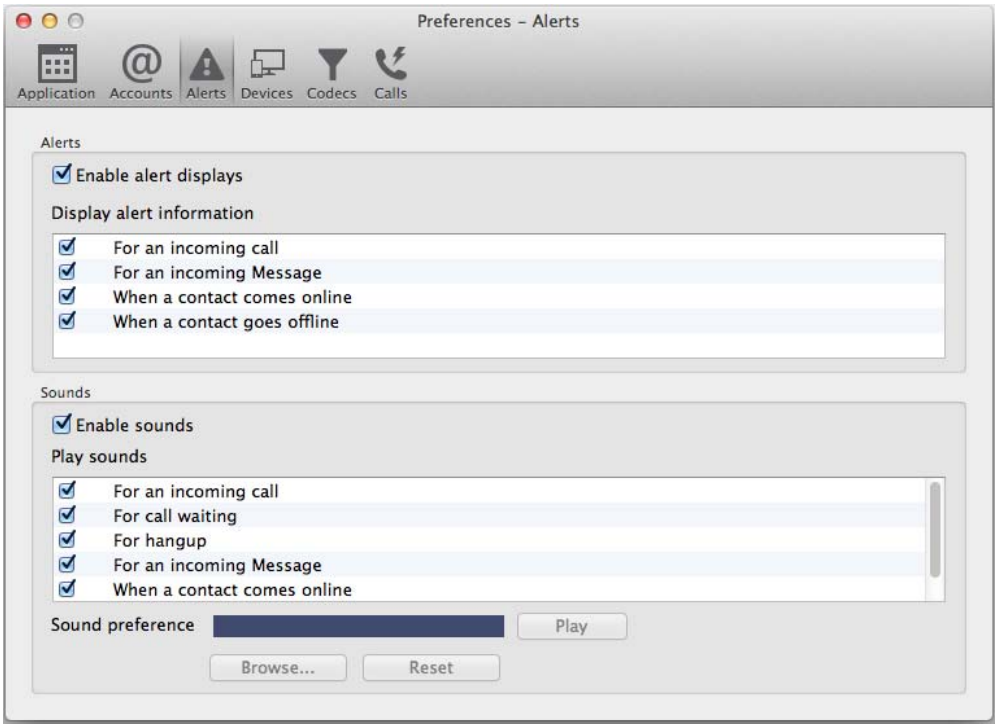
The icons (other than Accounts) let you set up general features of X-Lite.

Preferences – Application



This panel lets you set your preferences for general UI behavior.

Preferences – Alerts & Sounds



This panel lets you control the alert box and lets you assign sounds.

Enable Alert Displays

You can control whether the Call Alert box is displayed in different situations. You can also control how you are alerted to an incoming IM: either with a small IM Alert box or with the IM window itself.

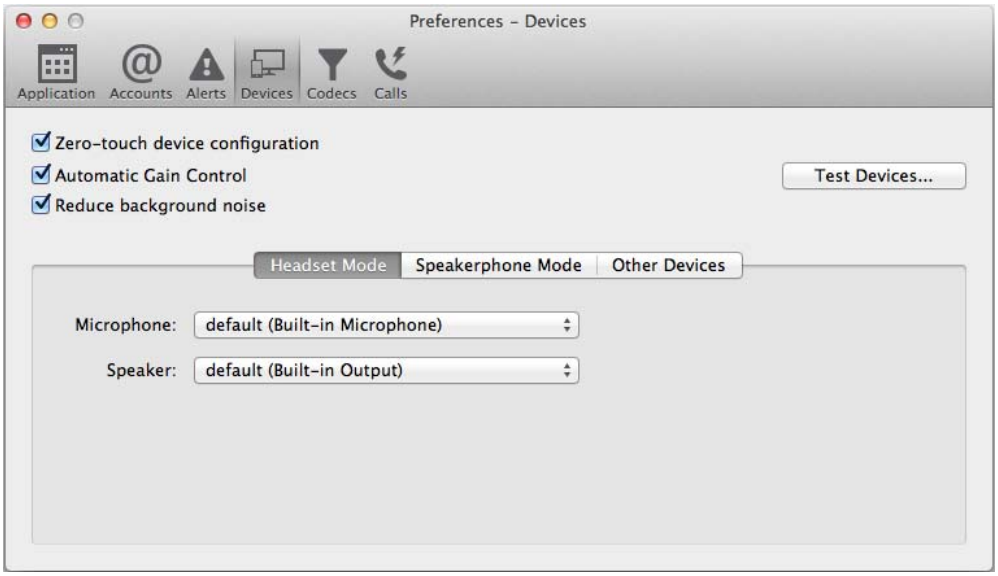
Assigning Sounds

You can assign specific sounds to a variety of actions or “events”.

1. Select the Enable sounds check box and select the check boxes for each desired event, or clear the Enable sounds check box to disable all sounds.
2. If enabling sounds, you can change the sound for each event: select the individual event. The value in Sound preference will change. Select the desired sound.

You can import sounds; these will be added to the list of sounds you can choose from when assigning a sound to an event.

Preferences – Devices



X-Lite automatically detects devices at each startup, and selects the most appropriate device for each purpose. If you do not like this selection, you can override it on this panel.

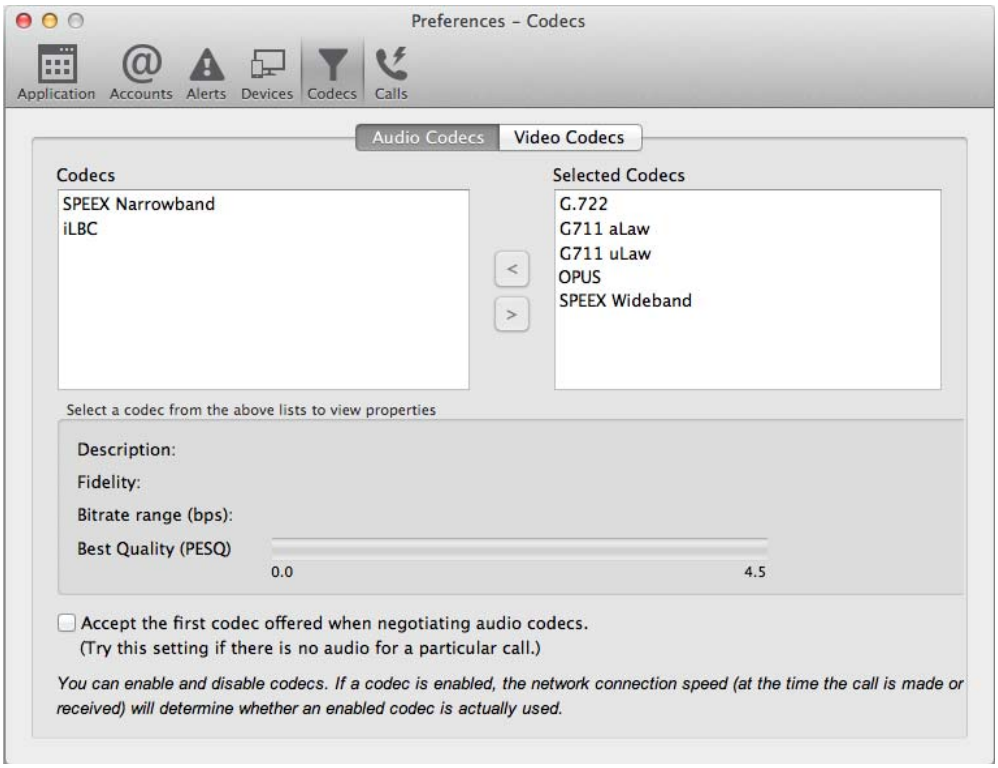
If you override a selection, it will apply the next time you start X-Lite, unless the device is no longer available, in which case X-Lite will again select the device to use.

Field	Description
Zero touch device configuration	Typically, leave on. When device configuration is on, if you change your audio or video device, X-Lite will automatically detect the new device and start using it.
Automatic gain control	This feature is typically on.
Reduce background noise	Automatically attempts to remove background noise. Typically on for the speakerphone.
Test Devices	For information on the Test Devices button, see “Troubleshooting” on page 49.
Headset Mode	
Microphone, Speaker	Change these fields only if you want to override the devices that X-Lite automatically selected. In both these fields, select the headset you are using. The headset is the device that is usually used for the speaker (the sound you hear) and microphone (recording your voice). The only situation in which the headset is not used is when the Speaker Phone button on the dialpad is pressed. Therefore, unless you will always be using X-Lite in speakerphone mode, you must make a selection here. Select the headset in both the Speaker device field and Microphone device field.
Speakerphone Mode	
Microphone Speaker	Same as headset mode, but for the device to use when speakerphone is one (on the toolbar). Select None if you do not have a speaker phone. The Speaker Phone button on the dialpad will be disabled. You can set different devices for the speaker and microphone: for example, you can set the speaker to the speakerphone and set the microphone to your headset.
Reduce echo	Turning this feature on improves sound quality. This feature is typically on.

Field	Description
Other Devices	
Ring on	The device where you want to hear the phone ringing. Change this field only if you want to override the devices that X-Lite automatically selected.
Camera	This field appears only on versions of X-Lite that include video functionality. Change this field only if you want to override the devices that X-Lite automatically selected. Select the camera model.
Resolution	Leave at standard, or change the size as follows: • Set it to high if you have a good camera and a computer with a fast CPU. You will know that you have set the size too large if: Your computer slows down (the video is using too much CPU) The video shows black areas or is slow or jerky. • Typically set it to low only in special situations, for example, when using wi-fi in a hotel. You will know that you have set the size too small if the video is fuzzy.

Preferences – Codecs

Audio Codecs



This panel shows all the audio codecs that are included in X-Lite. You can enable or disable codecs as desired.

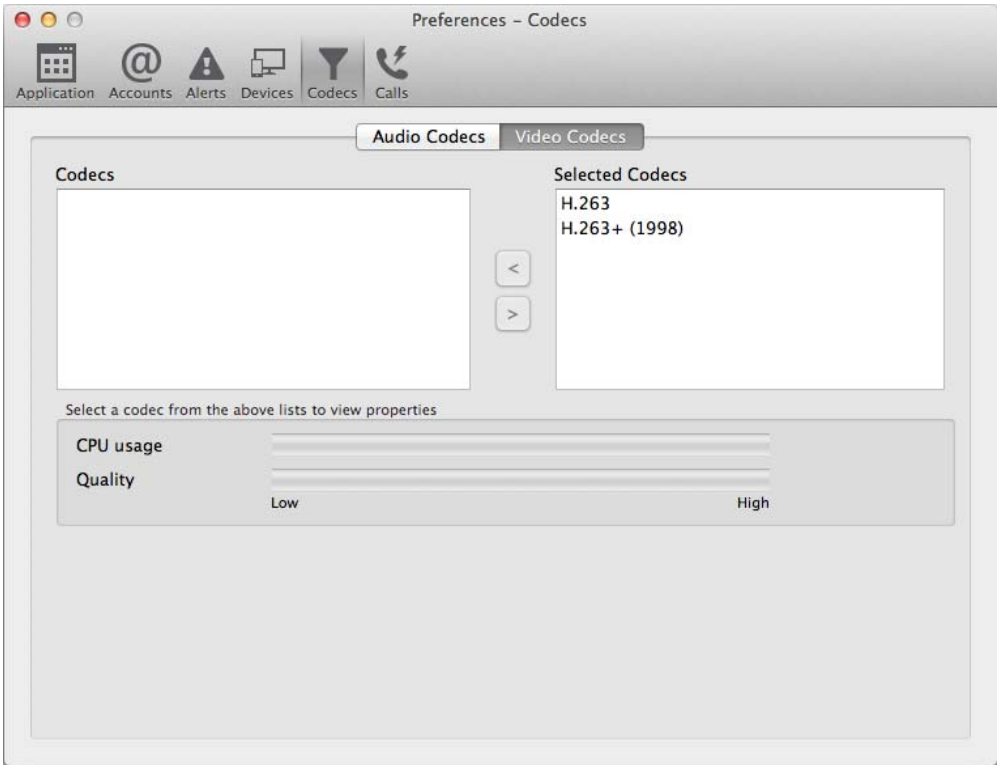
With only one codec enabled, all calls made will use that codec. With more than one codec enabled, X-Lite automatically chooses the best codec based on the other party's capability, the available bandwidth, and network conditions.

You cannot change the properties of any codecs.

Supported Codecs

Codec	Narrowband	Wideband	Included in X-Lite Retail
Broadvoice-32		✓	✓
Broadvoice-32 FEC		✓	✓
G.711aLaw *	✓		✓
G.711uLaw *	✓		✓
G.722		✓	✓
iLBC	✓		✓
OPUS		✓	✓
Speex	✓		✓
Speex Wideband		✓	✓
* Generally, at least one of these codecs must be enabled in order to place a PSTN (land line) call.			

Video Codecs



This panel shows all the video codecs that are included in X-Lite. You can enable or disable codecs as desired.

You can enable or disable codecs as desired. You may decide to disable a codec even though your VoIP service provider supports it.

With only one codec enabled, all calls made will use that particular compression format. With more than one codec enabled, X-Lite automatically chooses the best codec based on the other party's capability, the available bandwidth, and network conditions.

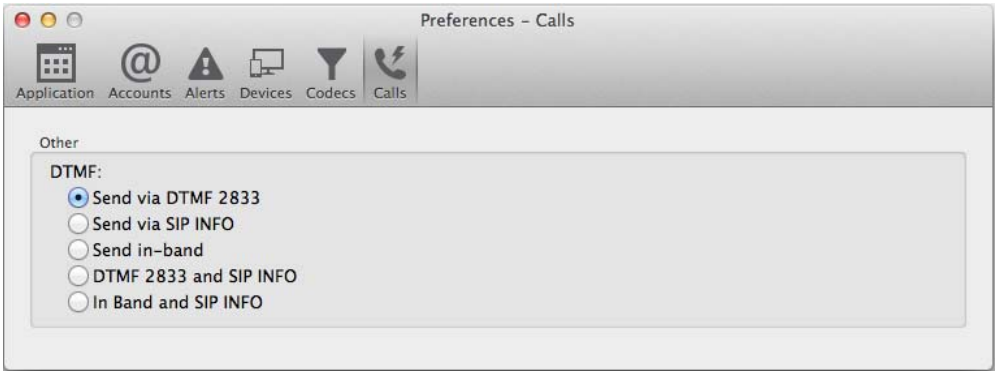
You cannot change the properties of any codecs.

Supported Codecs

- H.263
- H.263+1998
- H.264

Preferences – Calls

These settings let you configure how you want auto answer to handle incoming calls, when Auto Answer is enabled. (To enable Auto Answer, see page 12).



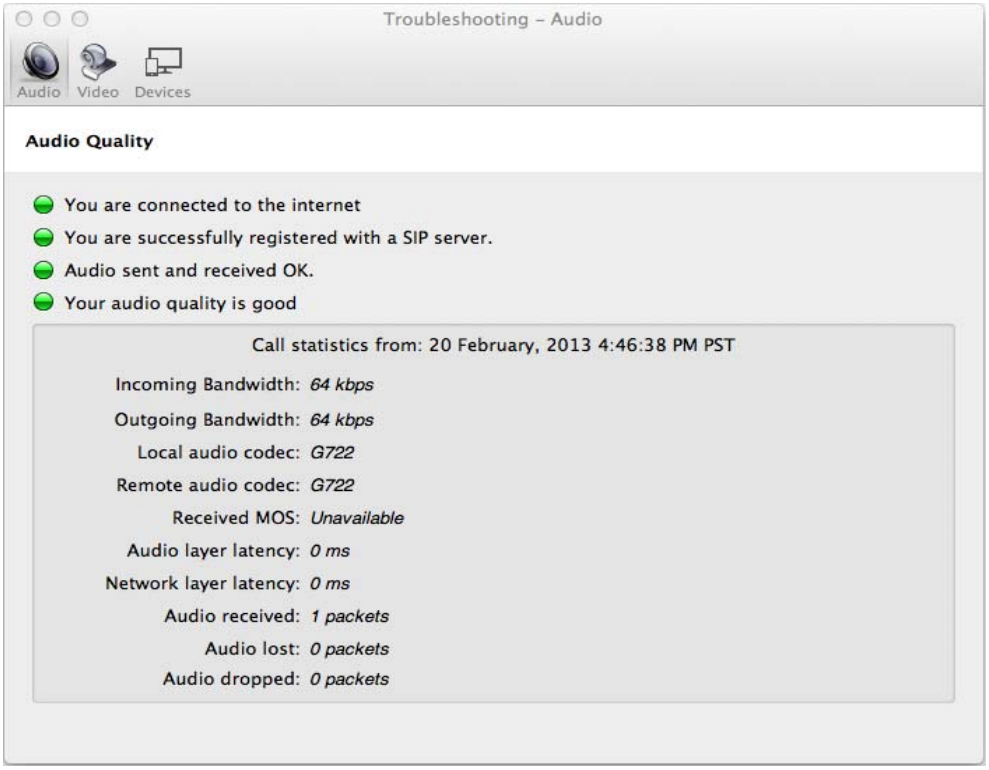
Field	Description
DTMF	You may need to change the DTMF configuration if you cannot interact with interactive voice response systems (auto attendants, voice-activated menus, and so on). Contact your VoIP service provider for the correct setting.

A Troubleshooting

From the menu bar, choose Help > Troubleshooting. The Troubleshooting window appears.

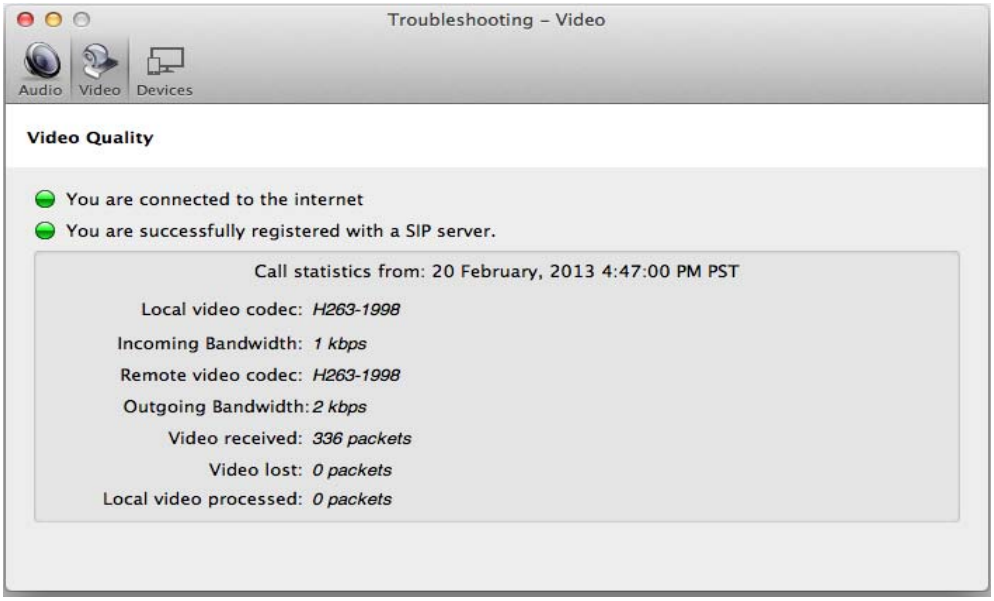
Testing Audio Quality

While you are on a phone call, you can test the quality of the audio. Note that to perform a valid test, you should be on an established call (not a call attempt).


Troubleshooting – Audio
Audio
Video
Devices
Audio Quality
You are connected to the internet
You are successfully registered with a SIP server.
Audio sent and received OK.
Your audio quality is good
Call statistics from: 20 February, 2013 4:46:38 PM PST
Incoming Bandwidth: 64 kbps
Outgoing Bandwidth: 64 kbps
Local audio codec: G722
Remote audio codec: G722
Received MOS: Unavailable
Audio layer latency: 0 ms
Network layer latency: 0 ms
Audio received: 1 packets
Audio lost: 0 packets
Audio dropped: 0 packets

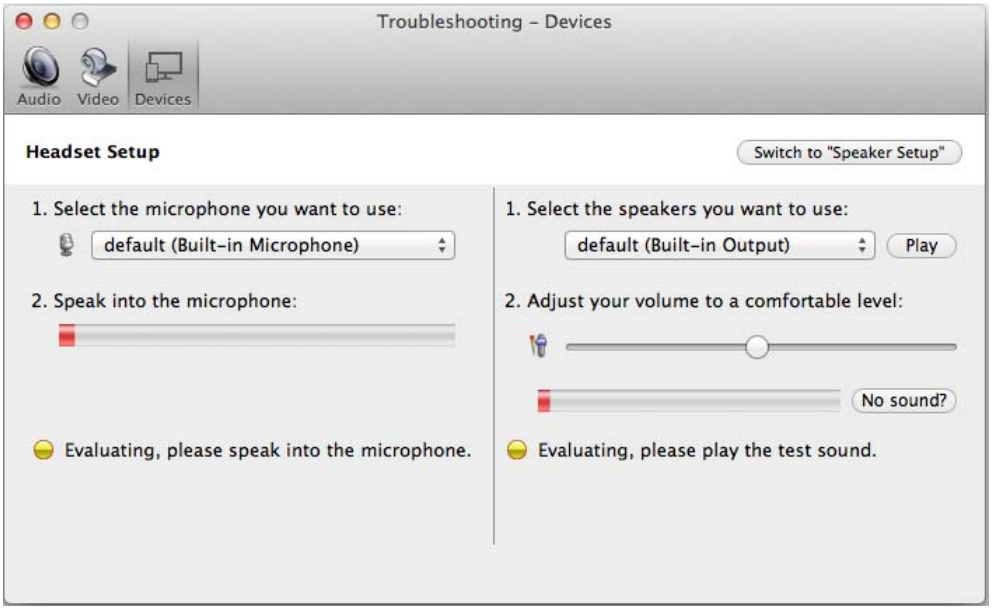
Testing Video Quality

While you are on a phone call, you can test the quality of the video. Note that to perform a valid test, you should be on an established call (not a call attempt).


Troubleshooting – Video
Audio
Video
Devices
Video Quality
You are connected to the internet
You are successfully registered with a SIP server.
Call statistics from: 20 February, 2013 4:47:00 PM PST
Local video codec: H263-1998
Incoming Bandwidth: 1 kbps
Remote video codec: H263-1998
Outgoing Bandwidth: 2 kbps
Video received: 336 packets
Video lost: 0 packets
Local video processed: 0 packets

Testing Audio Devices

You can verify that your microphone and speakers are working and can set the volume to a comfortable level without having to actually place a phone call.



B Dial Plan

When a call attempt is made, the call input (what you type, select or drag onto the call entry field) can be modified to ensure that the call gets placed successfully. This ability to modify the input relies on the existence of a “dial plan” for the account.

B.1 Dial Plan Syntax

The dial plan has the following syntax:

```
pattern[|pattern];match=1;<transformation>=<value>;[match=2;
<transformation>=<value>;]
```

Where:

- Items in [ ] are optional.
- Pattern: the pattern that will be matched. One or more patterns. Each pattern is separated by a | pipe. The pipe is optional after the last pattern. Each pattern is implicitly numbered, starting from 1.
- Match; Transformation: A pair that identifies the pattern number to compare with the input, and the transformation to perform on the input when a match is obtained. The transformation is optional (meaning that if there is no transformation for a pattern, then the input that matches this pattern is not transformed). One or more pairs.

  “match=” is a literal. “n” identifies the pattern. “transformation=” is replaced by a keyword, see below. “value” is replaced by a value.

  Spaces are allowed only in the `<value>` items.

Remember that dial plans are applied after the input has been cleaned up!

Example

```
\a\a.T|xxxxxxxxxx;match=1;prestrip=2;match=2;pre=8;
```

where:

- `\a\a.T` is the first pattern.
- `xxxxxxxxxx;` is the second pattern.
- `match=1;prestrip=2;` is the first match-transformation pair.
- `match=2;pre=8;` is the second match-transformation pair.

Pattern

Valid Content

The content for a pattern follows the digit map rules of RFC 2705, supplemented by the rules for regular expressions. Where there is an overlap between the digit map and regular expression rules, the digit map rules apply. For this reason, there are some special cases, included in the table below.

The following table describes the most common elements. All regular expression elements are supported.

Element	Origin	Description
|	Regular expression rules	Pipe character, used to separate patterns.
0 1 2 3 4 5 6 7 8 9	Literals	Literal digits, used as is.
# * a to z	Literals	Literal characters, used as is. Special cases: • The literal x character is represented by \x. • The literal t character is represented by \t.
x	Digit map rules	Wildcard for any single digit, 0 to 9.
\a	Regular expression rules	Wildcard for any single alphanumeric character.
[digit-digit]	Regular expression rules	A digit within the specified range.
[character-character]	Regular expression rules	A character within the specified range.
[digit1, digit2, digit3]	Regular expression rules	One of the characters in the collection.
.	Digit map rules	Repeat the last element 0 or more times. For example, xxxx. means repeat the last x 0 or more times, which means this pattern matches three or more digits (not four or more digits)! Use of this element results in a pattern with “minimum requirements”.
T	Digit map rules	A timeout period will take place before automatic dialing starts. The T timer forces X-Lite to wait after a match is made. This timer should always be included in these situations: • Any pattern that uses the . (dot). For example, if the pattern is xxxx. then adding a timer lets you type three or more digits. If there is no timer, then as soon as you type three digits, X-Lite makes the match as soon as you type three digits. • Any dial plan that has two patterns that are similar in elements but different in length. For example, if one pattern is xxx and the other pattern is xxxxxxx, then adding the timer lets you continue typing past three digits, in order to get a match on the second pattern. In this situation, the T timer should be included in the shorter pattern.

Transformation Keywords

Keyword	Description
prestrip	Strip the first n characters from the input before placing the call.
poststrip	Remove n number of characters from the end of the input before placing the call.
pre	Add the specified account prefix to the input before placing the call.
post	Attach the specified postfix to the input before placing the call.
replace	Replaces the input with the specified string before placing the call.

Order of Transformations

These transformations are always performed in the following order (the order in which the transformations are entered in the dial plan is not significant):

prestrip > poststrip > pre > post > replace

B.2 How the Input Is Processed

Comparing Input to the Dial Plan Patterns

The input is compared to the dial plan. Keep in mind that the input being compared is different depending on whether the input is dragged/selected or typed:

- If the input is dragged or selected, then the entire input is compared to the dial plan.
- If you are typing the input, then the digits are compared one by one as they are entered. Each time a new digit is entered, the comparison starts over.

Results of the Comparison

X-Lite finds a match according to the following rules.

Type of Match	Result If User Presses Enter or Call	Result if User Stops typing
The input matches the pattern and the pattern does not include the T timer	The transformation is performed. X-Lite attempts the call.	Nothing happens even after the T timer has expired.
The input matches the pattern and the pattern includes the T timer	The transformation is performed. X-Lite attempts the call.	The transformation is performed. X-Lite attempts the call.
The input does not match the pattern	No transformation is performed. X-Lite attempts the call.	Nothing happens even after the T timer has expired.

B.3 Examples

Example 1

```
\a\a.T|xxxxxxx.T;match=2;pre="9"
```

This simple example shows how to differentiate between a PSTN number and a softphone address, and how to add a “9” dialing prefix only to the PSTN number.

Example 2

```
3xxT|1xxxxxxxxxx|[2-9]xxxxxxxxx|+x.T;match=2;pre="9";
match=3;pre="91";match=4;prestrip=1;pre="9011"
```

`3xxT`	The first pattern is any three-digit number beginning with 3. No transformation. The assumption is that this is an internal extension. The timer forces X-Lite to wait after detecting a three-digit number beginning with 3, in case you are actually dialing a local call starting with 3.
`1xxxxxxxxxx`	The second pattern is any eleven-digit number beginning with 1. Prefix with 9 and dial as is. The assumption is that this is a long-distance PSTN call within North America (within North America, all long-distance calls start with 1).

`[2-9]xxxxxxxxx`	The third pattern is any ten-digit number beginning with a number other than 1. The assumption is that this is a local PSTN call within a ten-digit dialing zone.
`+x.T;`	The fourth pattern is a number of any length that begins with +, to indicate an international PSTN call from North America. Delete the +, prefix with 9011 (011 is the number to access an international line from North America).
`match=2;pre="9";`	For the second pattern, prefix 9 to access an outside line.
`match=3;pre="91";`	For the third pattern, prefix 9 and 1 to access an outside line and enter the long-distance code.
`match=4;prestrip=1; pre="9011"`	For the fourth pattern, remove the + and prefix 9011 to access an outside line and enter the international code.

C Exporting Contacts

You can export a contact list to a comma-separated file.

1. From the menu bar, choose Contacts > Export Contacts. The Export Contacts wizard starts.
2. Select the file type and file location for the created file.

A file of the specified type is created.

D Glossary

Broadband	Broad or wide bandwidth. In data transmission, the wider the band, the more data it is possible to transmit in a given time span. A cable, DSL and ADSL connection to the network provide broadband for data transmission. A dialup or ISDN connection typically provide a narrow bandwidth for data transmission.
Codec	The format by which audio or video streams are compressed for transmission over networks. Codecs can be categorized as either narrowband or wideband: Narrowband codecs work with low bandwidth such as a dialup internet connection. These codecs have a sampling rate of 8 kHz. Wideband codecs work with high bandwidths and result in better audio quality. However, they do not work with PSTN. These codecs have a sampling rate of 16 kHz.
Dial plan	The rules that X-Lite follows in order to interpret the softphone address or phone number that the user has entered and to modify the number or address, as required, to ensure that the call will be placed successfully.
DTMF	Dual-tone multi frequency. DTMF is the system that is used in interactive voice-response menu systems such as the menu system for accessing voicemail messages. The DTMF system allows the user to interact with the menu by pressing keys on a dialpad or keyboard.
Firewall	A technology that prevents unauthorized people connecting to your computer and to the applications running on the computer.
IM	Instant Messaging. A technology that lets users send text message and files for near instantaneous delivery and display on each others' computers.
MWI	Message Waiting Indicator. An indicator that there is a voicemail message for the owner of an account.
Narrowband	In data transmission, the wider the band, the more data it is possible to transmit in a given time span. A cable, DSL and ADSL connection to the network provide broadband for data transmission. A dialup or ISDN connection typically provide a narrow bandwidth for data transmission.
Presence	An instant messaging feature that allows users to share information about their online status.
PSTN	Public Switch Telephone Network. The traditional land-line phone network.
SIP account	An account that provides the user the ability to make VoIP phone calls. The account encapsulates the rules and functions the user can access.
Softphone address	The address used to connect to a SIP endpoint. In other words, the "phone number" used in a VoIP phone call. For example, sip:joseph@domainA.com.
USB device	Universal Serial Bus device. A device that follows a specific communications VoIP Voice over Internet Protocol. A variation of IP used for sending voice data over the internet, in other words, used for making phone calls over the internet.
VoIP service provider	A business that provides a VoIP service, allowing a user to connect to the internet in order to make VoIP phone calls using X-Lite. The VoIP service provider sets up a SIP account for the user.